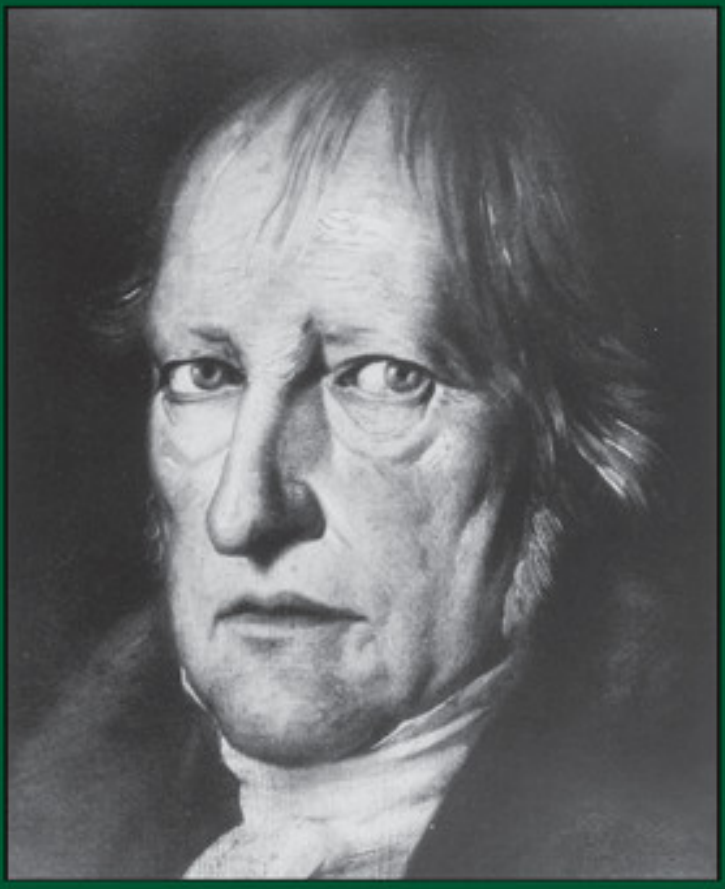
THE CAMBRIDGE HEGEL TRANSLATIONS

Georg Wilhelm Friedrich Hegel
The Science of Logic



CAMBRIDGE

GEORG WILHELM FRIEDRICH HEGEL
The Science of Logic

The purpose of the Cambridge Hegel Translations is to offer translations of the best modern German editions of Hegel's work in a uniform format suitable for Hegel scholars, together with philosophical introductions and full editorial apparatus.

This new translation of *The Science of Logic* by G. W. F. Hegel (also known as his *Greater Logic*) includes Book One (revised 1832), Book Two (1813) of Volume One, and Volume Two (1816). Recent research has given us a detailed picture of the process that led Hegel to his final conception of the System of Philosophy and of the place of the Logic within it. We now understand how and why Hegel distanced himself from Schelling, how radical this break with his early mentor was, and to what extent it entailed a return (but with a difference) to Fichte and Kant. In the introduction to the volume, George di Giovanni presents in synoptic form the results of recent scholarship on the subject, and, while recognizing the fault lines in Hegel's System that allow opposite interpretations, argues that the Logic marks the end of classical metaphysics. The translation is accompanied by a full apparatus of historical and explanatory notes.

GEORGE DI GIOVANNI is Professor of Philosophy at McGill University, Montreal. His previous publications include *Freedom and Religion in Kant and his Immediate Successors: The Vocation of Humankind, 1774–1800* (Cambridge, 2005), *Between Kant and Hegel: Texts in the Development of Post-Kantian Idealism* (2000), and *The Cambridge Edition of the Works of Immanuel Kant*, Vol VI: *Religion and Rational Theology* (Cambridge, 1996).

CAMBRIDGE HEGEL TRANSLATIONS

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The Science of Logic
Edited and translated by George di Giovanni

GEORG WILHELM FRIEDRICH HEGEL

The Science of Logic

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IN MEMORIAM
HENRY SILTON HARRIS
late fellow of the Royal Canadian Academy of the Humanities
scholar, philosopher, humanist, mentor, friend

m'insegnavate come l'uom s'etterna:
e quant'io l'abbia in grado mentr'io vivo
convien che ne la mia lingua si scerna.
Inferno XV, 85–87

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I wish to thank Anna Ezekiel, McGill doctoral student, for her much-needed help in shaping an unwieldy script into presentable form and for her truly heroic bibliographical work. Most of all, I thank Dr. Pierre Chetelat, at one time doctoral student at McGill and my research assistant for the past three years, for the care with which he read over the text of the translation at various stages of production and made numerous suggestions for improving style. Together with Anna, he also contributed to the composition of many of the notes. He is solely responsible for the Index. I consider myself fortunate to have had such capable collaborators.

I am of course responsible for any errors.

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GEORGE DI GIOVANNI

Abbreviations

A – /B – = Immanuel Kant, *Critique of Pure Reason*, cited according to the pagination of the 1781 and 1782 editions (A and B).

AK = *Immanuel Kant. Gesammelte Schriften*, ed. Royal Prussian Academy of the Sciences (Berlin: Reimer, 1902–), cited by volume and page number.

GA = *J. G. Fichte – Gesamtausgabe der bayerischen Akademie der Wissenschaften*, ed. R. Lauth and H. Gliwitzky (Stuttgart-Bad Cannstatt: Fromann-Holzboog, 1962–2005), cited by series number in Roman numerals, volume number, pagination, and when appropriate line number.

GW = *G. W. F. Hegel: Gesammelte Werke*, Deutsche Forschungsgemainschaft (Hamburg: Meiner, 1968–), cited by volume, page, and when appropriate line number.

Miller = *Hegel's Science of Logic*, trans. A. V Miller (London: Allen & Unwin, 1969).

Moni/Cesa = *G. W. F. Hegel: Scienza della Logica*, Vols. I and II, trans. Arturo Moni (1924–25); revised, Claudio Cesa (Roma-Bari: Laterza, 2001).

Guyer/Wood = *Critique of Pure Reason*, trans. and ed. Paul Guyer and Allen Wood (Cambridge: Cambridge University Press, 1998).

Introduction

PROLOGUE

Writing an introduction to a translation of Hegel's Logic is an even more formidable task than the translation itself. There are serious issues that immediately confront the author, and it will not be amiss to indicate them at the start, and also to declare how I have chosen to settle them. First, there is the issue of defining the task that an introduction should perform. An introduction cannot be a step-by-step guide for the neophyte across the intricacies of the Logic. Fortunately, it need not be. There are already guides of this kind available, some classic, others more recent, all good in their different ways.[1] An introduction may be a general statement about the project of the Logic, its place in Hegel's System, and the key concepts that govern the progression of the categories. But general statements of this kind, while of no use to those already in the know, do little in the way of indicating why the Logic is at least an interesting, and as I believe also still significant, philosophical product. It is not clear, in other words, whether such statements do any work at all. They certainly do nothing to motivate a reading of the Logic and may even simply reinforce well-established prejudices. For this reason, I have decided in this introduction to focus on the Logic's problematic nature as such. My claim is that the Logic is to be read as still in line with Kant's Transcendental Logic, though without being "transcendental" in Kant's sense. But once this determination is made, another issue immediately arises. Of course, however philosophically important the Logic might still be, the fact remains that it is a dated document. Why

[1] For instance, in chronological order: G. R. G. Mure, *An Introduction to Hegel* (Oxford: Clarendon Press, 1940) and *A Study of Hegel's Logic* (Oxford: Clarendon Press, 1950); John Burbidge, *Hegel's Logic: Fragments of a Commentary* (Atlantic Highlands, NJ: Humanities Press, 1981); Clark Butler, *Hegel's Logic: Between Dialectic and History* (Evanston, IL: Northwestern University Press, 1996); John Burbidge, *The Logic of Hegel: An Introduction* (Peterborough, Ont.: Broadview, 2006); David Gray Carlson, *A Commentary to Hegel's* Science of Logic (Basingstoke and New York: Palgrave Macmillan, 2007).

Hegel should ever have wanted to attempt it needs historical explanation. And this I have done with as much detail as space allowed. But the problem is that the moment one departs from a purely historical account and takes a definite stand on the nature of the Logic, one is immediately faced with a host of conflicting interpretations, both classic and recent, and, while one cannot enter in an introduction into an extended polemical debate with them, to ignore them would smack of dogmatism. I have tried to negotiate my way out of this dilemma by bringing out the fault lines in the Logic along which different and even contradictory readings are possible. I neither ignore nor dismiss these readings, even though I perforce refer to them globally. For the classic and more metaphysical of them there was no problem singling out J. M. E. McTaggart as the representative figure. But the state of the recent, in spirit more "hermeneutic" readings is still much too fluid for singling out any representative figure. Hence, although I shall mention the occasional name in footnotes, I shall refer to these more recent developments only in general, without emblematic representation. Between these two extremes, a host of more qualified readings are available in the literature. I hope that, by motivating a study of the Logic, I also motivate a study of all this literature.

Nothing is simple about Hegel's Logic, not even the history of its production. As we shall see, the text that we have represents a work in progress. Hegel did not live to carry out the revision that he had planned for the whole work but accomplished it only in part. There are good exegetical reasons, therefore, for comparing the revised with the corresponding unrevised parts of the text, and also for asking what changes Hegel might have brought to the parts never revised if he had lived to complete the revision. But considerations of this kind demand an already close acquaintance with the text or at least an immediate close perusal of it, and for this reason, with two exceptions which will come up in due time, I relegate them to an appendix.

THE PUBLICATION OF THE LOGIC

Hegel's interest in the science of logic dates at least as far back as 1801 when he moved to Jena to assist Schelling, hoping to establish himself in an academic career.[2] There, starting from the 1801/02 winter term, Hegel offered a course on Logic and Metaphysics every year, with the exception

[2] Hegel assisted Schelling in producing the *Kritisches Journal der Philosophie*, in which he also published his first essays. These essays are collected in GW 4.

of the 1805/06 winter term, after which time he left the city. We shall return to these lecture courses in due course. Despite Hegel's repeated announcements during this Jena period of a forthcoming book on the subject,[3] his published work on logic came considerably later. The first part of what was announced as the first volume of a planned two-volume *Science of Logic*[4] was published only in 1812, when Hegel was professor and rector at a gymnasium in Nürnberg. The second part of the same volume came the year after, in 1813.[5] Both parts went under the subtitle of *Objective Logic*, and the second carried the further subtitle "The Doctrine of Essence." The announced second volume was finally published in 1816, still in Nürnberg, in one part and with the subtitle "The Doctrine of the Concept."[6] Another much-abbreviated *Science of Logic* appeared in 1817, as the first part of an *Encyclopedia of the Philosophical Sciences in Outline*[7] which Hegel, who in the meantime (1816) had been appointed as professor at the university in Heidelberg, produced as the textbook for his lecture courses. He published a second, heavily revised edition of this same work in 1827, and yet a third, with minor revisions, in 1830.[8] These two last editions of the Encyclopedia were still published in Heidelberg, even though by that time Hegel had long since moved to Berlin. In this city he had continued to lecture on the subject of logic.[9] We know, moreover, that in 1826 he had begun to give some thought to a new edition of the original Nürnberg work,[10] and in fact, in January of 1831, he submitted to the publishers a heavily revised version of Part I of Volume One of that first *Science of Logic*, that is, the part published in 1812. This new version, now entitled "The Doctrine of Being," came out in print the year after,

[3] He first promised a textbook on the subject in connection with his announcement of a lecture course on Logic and Metaphysics for the summer term of 1802: "*secundum librum sub eodem titulo proditurum*." GW 7, 361. He repeated the promise in the announcement for the winter of 1802.

[4] *Wissenschaft der Logik*, erster Band, *Die objektive Logik* (Nürnberg, 1812). GW 11. This is the counterpart of Book I in the 1833 edition and also the Lasson edition.

[5] *Wissenschaft der Logik*, erster Band, *Die objektive Logik*; zweites Buch, "Die Lehre vom Wesen" (Nürnberg, 1813). GW 11. This is Book II in the 1833 edition and also in the Lasson edition.

[6] *Wissenschaft der Logik oder die Lehre vom Begriff* (Nürnberg, 1816). GW 12. This is Book III in the 1833 edition and also in the Lasson edition.

[7] *Encyclopädie der philosophischen Wissenschaften im Grundrisse*. Zum Gebrauch seiner Vorlesungen (Heidelberg, 1817). GW 13.

[8] GW 19 and 20.

[9] Notes from the 1831 lectures taken by Hegel's son Karl have been published in the series *Vorlesungen, Ausgewählte Nachschriften und Manuskripten*, *Vorlesungen über die Logik*, Band 10, ed. Udo Rameil and H.-Christian Lucas† (Hamburg: Meiner, 2001). Notes from lectures on logic given at Heidelberg in 1817 and taken by the student F. A. Good have been published in the same series, *Vorlesungen über Logik und Metaphysik*, Band 11, ed. Karen Gloy (Hamburg: Meiner, 1992).

[10] Cf. GW 21, 400.

in 1832[11] – posthumously, for in the meantime, on November 14, 1831, Hegel had suddenly died. It was then republished in 1833 by Leopold von Henning, together with Part II of the same Volume One from 1813 and the Volume Two from 1816. In this form the Logic was part of a complete edition of the philosopher's works that his disciples had hastily arranged after his death. It is this text that became the canonical version of Hegel's so-called Greater Logic.[12] It was re-edited by Georg Lasson in 1923,[13] and more recently again – now equipped with a detailed critical apparatus and with Part I of Volume One in both its 1812 and 1832 versions – as Volumes 11, 12, and 21 of the Academy Edition of Hegel's *Gesammelte Werke*.

It is likely that Hegel, had he lived longer, would have revised the rest of this Greater Logic.[14] But all changes apart, whether actual or possible, one thing is certain. As of 1807 at least, and throughout the long subsequent process of publication of *The Science of Logic*, the place of this science as the first of a three-part System of Philosophy that comprises Logic, Philosophy of Nature, and Philosophy of Spirit was clear and fixed in Hegel's mind. This, however, was not the case at the beginning of his Jena period. In the first sketches of the System, the one extreme of Logic tended at that time to fall into what he called "Logic *and* Metaphysics," and the other extreme of Philosophy of Spirit tended to fall into Ethics and Religion. Historically and conceptually, therefore, of greater interest than any changes later made to the Logic is precisely how Hegel ever came to merge logic and metaphysics, and how this merger both reflected and made a difference to his conception of both Logic and System. For this, we must consider the earlier texts that have come down to us from the Jena years.

THE GENESIS OF THE LOGIC

It is only recently, since the Academy Edition of the works of Hegel, that we have a reliably complete picture of the development of Hegel's thought

[11] *Wissenschaft der Logik*, erster Teil, *Die objektive Logik*, erster Band, *Die Lehre vom Sein* (Stuttgart und Tübingen, 1832). GW 21.

[12] *Georg Wilhelm Friedrich Hegel's Werke*. Vollständige Ausgabe durch einen Verein von Freunden des Verewigten. Bände III–V. *Wissenschaft der Logic*, ed. Leopold von Henning (Berlin, 1833). The 1832 edition of the "Doctrine of Being" was quickly forgotten, so much so that Georg Lasson, in 1932, was not aware of its existence. He thought that Henning had derived the revised version of the 1812 Part One directly from a manuscript of Hegel intended for publication. For this, see GW 21, 399.

[13] *Sämtliche Werke*, Band III/IV (Leipzig, 1923 and 1932).

[14] But we have no definite indication to that effect. Cf. GW 21, 403. For actual and possible changes, see the Appendix to the translation of the text.

during that formative period. From the beginning, the archaeological problem has been twofold. For one thing, the texts relating to the formation of the Logic and the System have come to us in an unpublished and fragmentary, in some cases extremely fragmentary, form. For another, these texts were badly misdated by Karl Rosenkranz, the one who had direct access to Hegel's literary estate and was the first to report on them.[15] This circumstance interfered with later editions of the surviving texts,[16] even at a time when the editors had already begun to doubt the accuracy of Rosenkranz's dating. Old prejudices die hard. Fortunately these problems have been alleviated lately because of the recovery of hitherto lost manuscripts and the painstaking work of the editors of the *Gesammelte Werke* who have subjected to statistical analysis the progressive changes in Hegel's handwriting during the Jena period. Thus our current dating of texts is as trustworthy as historical methods will allow, and it provides us with a solid basis for a convincing reconstruction of the evolution of Hegel's thought to which the texts themselves give witness.[17] For our purposes, the relevant data are as follows.[18]

1801/02. In the Jena course catalogue of this winter term Hegel announced a private seminar in "Logic and Metaphysics" and also, *gratis*, an "Introduction to Philosophy." As described in the announcement, the seminar would expound a "general or transcendental Logic," that is to say, it would treat "the system of the forms of finitude, or a theory of the objective understanding," which is the source of the usual logical constructions of subjective reflection. But it would then let reason "destroy" these finite forms and thereby move on to Metaphysics where the task of philosophy is finally discharged in its various systematic forms and in

[15] Karl Rosenkranz, *Georg Wilhelm Friedrich Hegel's Leben: Supplement zu Hegel's Werke* (Berlin, 1844; reprinted, Darmstadt, 1967); "Hegels ursprüngliches System 1798–1806. Aus Hegels Nachlass," *Literarhistorisches Taschenbuch*, ed. Robert Prutz, Leipzig, ii (1844). A reprint of the four volumes of this journal is available (psc@periodicals.com).

[16] *G. W. F. Hegel: Hegels erstes System*, ed. H. Eherenberg and H. Link (Heidelberg, 1915); *Jenenser Logik, Metaphysik und Naturphilosophie*, ed. George Lasson (Leipzig, 1923); *Jenenser Realphilosophie I*, ed. Johannes Hoffmeister (Leipzig, 1932).

[17] Hermann Nohl was the first to subject Hegel's handwriting to this analysis in connection with his edition of Hegel's early theological writings. *Theologische Jugendschriften*, ed. Hermann Nohl (Tübingen, 1987; reprinted 1968). For the chronology of the Jena period, see "Die Chronologie der Manuskripten Hegels in den Bänden 4 bis 9 [of GW]," in the editorial apparatus of GW 8.348ff. Also: Heinz Kimmerle, "Dokumente zu Hegels Jenaer Dozententätigkeit (1801–1807)," *Hegel-Studien*, 4 (1967), 21–99; *Das Problem der Abgeschlossenheit des Denkens*, *Hegel-Studien*, Beiheft 8 (Bonn: Bouvier, 1870). For a detailed, English-language study of the period based on the new chronology, see H. S. Harris, *Hegel's Development: Night Thoughts: Jena 1801–1806* (Oxford: Clarendon Press, 1983).

[18] This is a greatly abbreviated list of the documents we actually have. I list only those required for the subsequent discussion.

accordance with human interests.[19] The brief fragments that we have from these years are of notes that Hegel most likely intended for these announced courses.[20]

We can gather from these fragments that Hegel's "Introduction" would have aimed to make the same point which he was later to repeat in the *Phenomenology of Spirit*, namely that philosophy is its own introduction.[21] But, inasmuch as philosophy is an empirical product of history, it always assumes a subjective shape which, when taken individually, can convey the false impression of being absolute. There is room, therefore, for a critical reflection that would dispel this impression. To perform this clarifying task is precisely the task of an introduction to philosophy. It is simply a matter of bringing to light an absolute content which is already at hand in historically conditioned materials, and which, once brought to light, would stand on its own without the need of historical support. This content is none other than the life of the Absolute, at least as Schelling conceived of the Absolute at the time.[22] Just as the absolute substance[23] first gives a sketch of itself in the idea,[24] then realizes itself in nature by giving itself an articulated body therein, and in spirit finally sums itself up by recognizing itself in this process of externalization, so philosophy must display the idea of the Absolute in cognition, and must then develop it into a philosophy of nature, an ethical system, and finally into a religion that recaptures the simplicity of the original idea. The assumption is that that idea is originally present to the philosopher in intuition, that is, in a still unarticulated immediate awareness. Here we have Hegel's first outline of a system: Idea (Logic and Metaphysics), Nature, Ethics, Religion. Philosophy must re-enact conceptually the process which is the very life of the absolute substance. As Hegel warns, philosophy's main adversary in this task is a spurious metaphysics, the product of bad reflection, which constantly threatens to introduce rigid conceptual distinctions where there are in fact none, and thus pre-empts the possibility of a truly organic grasp of reality. Philosophy's true intention ought to be none other than that "by it and through it we learn how to live."[25]

[19] For the text, see GW 5, *Schriften und Entwürfe (1799–1808)*, ed. T. Ebert, M. Baum, and K. R. Meist (Hamburg: Meiner, 1998), p. 654.
[20] For the fragments, see GW 5, 259–275.
[21] *Phenomenologie des Geistes* (Bamberg & Würzburg, 1807); GW 5, 59–60.
[22] See the second major fragment, GW 5, 262–265.
[23] *das absolute Wesen.*
[24] "... in der Idee sein Bild gleichsam entwirft." Just how the Absolute accomplishes this, and what "idea" means in this context, is of course one of the problems of Schelling's pantheism.
[25] GW 5, 261.

As for the announced "Logic and Metaphysics,"[26] we learn from the same fragments that the Logic would have played precisely the introductory role of displaying the forms of finite ("bad") reflection. It would show how this reflection, which is the product of the understanding, apes the attempt of reason to generate identity but only ends up with a formalistic counterfeit of it. By overcoming this formalism, logic then makes possible the transition to metaphysics, that is to say, it makes possible "the complete construction of the principle of all philosophy"[27] on the basis of which we can then "construct the possible systems of philosophy."[28] It is in this way, in the medium of consciousness or in spirit, that for Hegel the reality of an otherwise shifting world of appearances becomes a harmonious whole.[29]

1802/03. We have the fair copy of a *System of Ethics* obviously ready for publication but in fact never published. It is complete, though the final pages are sketchy, and there might be two lacunas in the text as it has come down to us.[30] It was composed at a time when Hegel was busy with a number of other projects, all dedicated to ethical issues. He was still working on a manuscript concerning the German Constitution, a project on which he had started even before moving to Jena.[31] He also published an essay on natural law in the *Critical Journal of Philosophy*;[32] announced courses on the same subject (summers of 1802 and 1803), and gave two of three announced public lectures on a critique of Fichte's concept of natural law.[33] All evidence leads one to believe that the text is the reworking of notes prepared by Hegel for his announced lecture courses. The fact that it starts quite abruptly makes it likely that it was intended as only one part of a larger compendium of philosophy, and that it was never published because the compendium itself was not ready. In the 1801/02 outline of Hegel's planned System, it would constitute the third part.

[26] GW 5, 269–275. There is evidence that Hegel interrupted the seminar before its official end. Cf. GW 5, 659.

[27] "... das Prinzip aller Philosophie vollständig zu konstruiren." GW 5, 274.

[28] "... wir uns die Möglichen Systeme der Philosophie konstruiren können." GW 5, 274.

[29] "... aber diese sich bewegende Welt ist ohne Bewußtsein der Harmonie; sie ist nur im Geist des Philosophen ein harmonisches." GW 5, 269.

[30] GW 5, 660–661. The text, which is now available in a critical edition in GW 5, was edited and translated by H. Harris and T. M. Knox on the basis of an earlier edition of Georg Lasson (Leipzig, 1913). Cf. *G. W. F. Hegel:* System of Ethical Life *(1802/3) and* First Philosophy of Spirit *(1803/4)* (Albany: State University of New York Press, 1979). For a description of the historical and conceptual context of the text, and an analysis of it, see H. S. Harris's introduction to this translation.

[31] GW 5, 552–553.

[32] "Über die Wissenschaftlichen Behandlungsarten des Naturrechts, seine Stelle in der praktischen Philosophie, und sein Verhältniß zu den positiven Rechtswissenschaften." GW 4, 415–464.

[33] The third was never given because, as an unsalaried instructor (*Privatdozent*), he was not allowed to hold lectures *gratis*, and a complaint was lodged against him to that effect. GW 5, 665–666.

The text is dense and intricate, but would not necessarily have been obscure to those who, like Hegel's prospective students, were familiar with Schelling's Identity Philosophy. For it is clear, even from its abrupt opening, that at the time Hegel still shared his mentor's basic assumptions regarding experience.[34] We read in the first lines:

> Knowledge of the Idea of the absolute ethical order depends entirely on the establishment of perfect adequacy between intuition and concept, because the Idea is nothing other than the identity of the two. But if this identity is to be actually known, it must be thought as a made adequacy. But because they are then held apart from one another [as its two sides], they are afflicted with a difference.[35]

The intuition/concept connection is of course Kantian in origin. In Schelling's System, however, it acquires a specialized new meaning. Intuition is no longer restricted to the senses but must be understood rather as the immediate feeling of the totality of reality which is presumably at the origin of consciousness and which conceptualization is then supposed to bring to reflective consciousness. But in fulfilling this function, the concept sets itself up against the intuition, as one particular form of consciousness as against another, and the task thereby arises of regaining the unity of reality as originally intuited. This is a task which is to be discharged in the medium of ideas at different levels of experience. Hegel's essay is an account of how the unity is attained in the particularized context of ethical life. The problem is to think how a people (*Volk*) can regain in the medium of appropriate laws and institutions the natural feeling of self-identity which made it a people originally but which is lost precisely in the attempt to canonize it in reflective laws and institutions. The conclusion of the essay is too sketchy to give any clear idea of how this recovery is finally to be realized. However, if we take Hegel's 1801/02 outline of a System as the norm, the resulting new people (the absolute *Volk*) would be a religious community. This is exactly what Hegel says in a text which we do not have, but which Rosenkranz describes at length and which very likely dates from around this time.[36] Moreover, still taking the 1801/02 outline as the norm, it appears that the interplay of intuition and concept which in this essay Hegel documents only by reference to the life of a society would

[34] This is in no way to imply that Hegel simply followed Schelling. On the contrary, while using Schelling's language, he subtly, and perhaps even inadvertently, gave it new meaning from the beginning.

[35] GW 5, 279.2–6. I am using the Harris and Knox translation, pp. 99–100.

[36] Rosenkranz, *Leben*, pp. 132–141. Harris gives a summary of this text in an Appendix to his translation of the *System of Ethics*, pp. 178–186. According to Harris, it was likely the conclusion of the *Philosophiæ universæ delineatio* of 1803; see GW 6, 340, and Harris's translation, p. 202, note 1.

have to be detected by the philosopher in nature itself, inasmuch as nature constitutes the antecedent of communal existence. It would consist in a process by which the more organic forms of existence incorporate in their internal unity the otherwise dispersed elements of the inanimate forms that precede them. This is a process that ultimately leads to the creation of a social organism, and it is the subject matter of the Philosophy of Nature. Logic, for its part, would critically expose and overcome the type of conceptualization that tends to absolutize the opposition of intuition and concept, while Metaphysics would provide the basic ideal schemas of a reconciliation of the two in real existence.

1803/04. Hegel continued to lecture on his projected system. He announced a *Philosophiæ universæ delineatio* for the 1803 summer term,[37] and a lecture course again on the system of speculative philosophy for the subsequent 1803/04 winter term.[38] We do not know how extensive a use he made for these courses of prior notes, but we do have two extensive though fragmentary manuscripts that are clearly connected to them. One is a text, in parts left incomplete by Hegel himself, of a Philosophy of Nature and a Philosophy of Spirit.[39] The other is the manuscript of a Logic, Metaphysics, and Philosophy of Nature, in fair copy but reworked in places, fragmentary in parts and broken off by Hegel himself somewhere in the Philosophy of Nature, just before the stage of "organic nature" would have begun.[40] Both texts are important for different but complementary reasons. Regarding the first, its Philosophy of Spirit differs substantially from the earlier *System of Ethics* in two significant respects. For one thing, it starts with consciousness and not with *Volk*, as the earlier text does. The introduction of this extra element provides a smooth transition from the Philosophy of Nature to that of Spirit which would have been lacking in any intended prior complete System. Consciousness is where organic nature acquires its highest point of concentration by reflecting upon itself and where nature as such thus becomes spirit. When this consciousness develops into language, and language becomes in turn the language of a people, the social character of spirit is then revealed. It is only at this point that Hegel returns in his

[37] GW 6, 340.

[38] "Philosophiae speculativae systema, complectens a) Logicam et Metaphysicam, sive Idealismus transcendentalem, b) philosophiam naturae et c) mentis, ex dictatis exponet." GW 6, 340.

[39] *Jenaer Systementwürfe I*, GW 6.

[40] *Jenaer Systementwürfe II*, *Logik, Metaphysik, Naturphilosophie (1804/05)*, GW 7. There is an English translation of the Logic and Metaphysics by the Ontario Hegel Group, *G. W. F. Hegel, The Jena System, 1804–5: Logic and Metaphysics*, translation edited by John W. Burbidge and George di Giovanni, with an Introduction by H. S. Harris (Kingston and Montreal: McGill-Queen's University Press, 1986).

manuscript to social existence, the subject matter of the earlier *System of Ethics*. The manuscript breaks off at the point where this existence assumes the form of labor. We do not know whether Hegel would have proceeded to develop it into the social products of Art and Religion, thereby merging the Ethics and Religion of the 1801/02 outline into one unit as is done in the mature Philosophy of Spirit. But of greater consequence is the other respect in which the text differs from the *System of Ethics*. In the latter work, spirit is treated in the same vein as nature would be, that is, from the speculative standpoint of an objective observer contemplating it at a distance – from the outside, so to speak, as one must indeed do when contemplating nature.[41] With the introduction of consciousness, however, Hegel is now in a position to follow up the development of spirit from within the subjective standpoint of spirit itself – to follow it internally as it would appear to the subject matter itself under observation, namely spirit. Here we have the beginning of a phenomenological analysis of spirit, an especially significant innovation to which we shall return in a moment.

Regarding the other text, one can discern in it a parallel development. Logic and Metaphysics still appear as two separate pieces, as they do in the 1801/02 planned System. Presumably Logic is still intended to be the introduction to Metaphysics.[42] But the distinction between the two tends in fact to disappear. Hegel still seems to think of dialectic in a negative, basically still Kantian sense, as a movement that irrupts from within finite thought revealing the contradictory nature of its determinations when these are held absolutely apart. But this movement, instead of being elicited under the pressure of external critical reflection as one would expect on a purely negative conception of dialectic, now assumes the character of a movement internal to thought as such, and extending to the categories of the Metaphysics as well. It is a movement by which thought develops into ever more complex forms and which can be traced from within thought itself simply by pursuing its internal logic. The net result is that, *de facto*, Logic loses its introductory function. It extends into Metaphysics, thus turning the latter into Logic. The metaphysical constructions that should have given objective expressions (in a kind of conceptual art in the style of Schelling) to the unity of being otherwise only immediately felt in intuition – a unity in which all differentiation is shown to be null – turn instead into reflective conceptual elaborations of forms which the concept itself takes on *as concept*. The concept thus gains in subjective depth, just

[41] This is the standpoint from which ethical matters are dealt with in Chapter 5 of the *Phenomenology of Spirit*, as contrasted with the way they are treated in Chapter 6.

[42] The first pages of the manuscript are missing.

as spirit does in the text of the Philosophy of Spirit. Connecting the two, formal thought and spirit, is the concept of the "infinite" which is now understood as transcending the "finite," not in the sense that it annuls it, but in the sense that it provides the conceptual space within which the finite can emerge in its multifarious forms and yet also be contained by the infinite. As a concept, the "infinite" provides the abstract schema, already attributed by Hegel to consciousness in 1801/02, for transforming the otherwise shifting world of nature into a harmonious whole.[43] What we have, in other words, is a first adumbration of the mature Logic, and, together with the other text, at least the materials for a System divided into Logic, Philosophy of Nature, and Philosophy of Spirit. The fact that Hegel did not complete his long since planned System at this time, even though he had manuscripts for it apparently intended for publication, might well indicate that his idea of System was then undergoing radical modifications.

1805/06/07. Two developments, which are the final ones we shall consider here, occurred in these years. Hegel announced a lecture course on *Realphilosophie* (that is, on nature and spirit) several times, but we have secure evidence that he actually gave it only for the 1806 summer term.[44] We also have from these years a manuscript which is also on the subject of *Realphilosophie*, in fair copy but heavily reworked.[45] Of special interest in this text is that in the third and final part of the section on spirit, detailing the structure of a society such as the absolute *Volk* would create, Hegel describes this process of social constitution as one in which nature becomes certain of itself.[46] In other words, while in 1803/04 Hegel provided a smoother transition from nature to spirit by introducing the factor of consciousness and thus adding to nature, so to speak, a new dimension of depth, he now adds to it yet another dimension by conceiving spirit as the place where nature becomes conscious of its being conscious, that is to say, the place where it becomes deliberate about itself or, again, where it becomes a product of spirit. This is a process which is completed in the media of art, religion, and science, in each of which nature assumes a new existence as the subject matter of spirit's interests and activities. But now, Logic is the science of the concept. What is therefore provided at the conclusion of the system is a smooth transition, not just from nature to spirit, but from spirit, or the achieved system, back to the concept, that is to say,

[43] See note 29 above. [44] Cf. GW 8, 318.

[45] *Jenaer Systementwürfe III*, GW 8. There is an English translation of the part on the Philosophy of Spirit. Leo Rauch, *Hegel and the Human Spirit: A Translation of the Jena Lectures on the Philosophy of Spirit (1805–6) with Commentary* (Detroit: Wayne State University Press, 1983).

[46] GW 8, 258.18–20. English trans., p. 155.

back to the beginning of the System which is also its foundation. Logic thus loses whatever vestige of a role it might still have had as an introduction to the system, and regains instead, if one just ignores the "thing-in-itself" of Kant, a function not unlike that of the latter's Transcendental Logic. Just as the categories define the concept of an object in general (*ein Gegenstand überhaupt*) which is then to be given content in both theoretical and practical shape, now the Logic defines the structure of an original conceptual space that makes possible both spirit's interpretation of nature as its prehistory and of itself as forging that same nature into a meaning-generating community. Spirit, in other words, transforms nature into a harmonious whole, and this transformative function is precisely what Hegel had from the beginning declared philosophy's purpose to be. That space is at the origin of experience – is constitutive of it. But it becomes itself the object of reflective awareness only as the ultimate work of spirit, in the medium of the consciousness typical of the consummate community. The philosopher is the one responsible for this Logic, and Logic itself now turns out to be both the basis *and* the final product of the system.

This is the first development. The second has to do with Hegel's publication plans in these years. We know that, in connection with his proposed teaching for the summer terms of 1805 and 1806, Hegel announced the publication of a book that would contain the whole science of philosophy.[47] This promissory note was never honored – at least, not at face value. But then, for the winter term of 1806/07, Hegel announced a course on "logic and metaphysics, or speculative philosophy, premised by a phenomenology of the mind based on the soon to be delivered first part of his book, *The System of Science*."[48] And for the summer term of 1807, when Hegel did not in fact lecture, this announced first part was indeed available at the bookstore. We learn from Rosenkranz that Hegel had been developing, in connection with his introduction to logic and metaphysics, the concept of the experience that consciousness makes of itself. It is now this science of experience, the *Phenomenology of Spirit*, which was given the role, previously attributed to logic, of introducing speculative philosophy, logic included.

Such are the relevant data. An answer to the question of why this shift of perspectives occurred, how phenomenology replaced logic and how this change made a difference to Hegel's conception of logic, cannot avoid an

[47] "... totam philosophiæ scientiam, i.e. philosophiam speculativam (logicam et metaphysicam) naturæ et mentis, ex libro per æstatem prodituro ..." GW 9, 427.

[48] "... logicam et metaphysicam s. philosophiam speculativam, præmissa Phænomenologia mentis ex libri sui, System der Wissenschaft, proxime proditura parte prima." GW 9, 427.

element of interpretation. But there can be little doubt that the shift was associated with the distance that Hegel gradually assumed with respect to Schelling (who, incidentally, left Jena in 1803), or, perhaps more to the point, with his gradual recognition that the supposed intuition of the Absolute on which Schelling's system was based no longer served any function in his own system as this had developed in his hands. And it is at least not unlikely that Fichte's subjectivity (which Hegel had severely criticized in 1801, though not for its being "subjective" but for being "abstractly" subjective)[49] is what provided the extra conceptual factor that cemented his developing system – even though, it must immediately be added, in transcending Schelling Hegel was at the same time also transcending Fichte. The point is that in both Fichte's *Wissenschaftslehre* (or Science of Knowledge, as Fichte named his philosophy), and Hegel's just published *Phenomenology of Spirit*, there are, to use Fichte's early language, two series of representations: (1) those which are the products of a subject of experience who is engaged in the process of conceptualization, and (2) those of a subject (the philosopher) who reflects upon the representations of the other series and explicates what they truly are the representations of.[50] And for both Fichte and Hegel the upshot of this second reflective series is the same, namely that whatever the experience a subject is engaged in, and whatever the representational medium in which that experience is realized, the theme underlying it or the motivation urging it on is the overarching interest on the part of the subject to construe a world for himself within which he can attain self-identity. This is of course still a play on Kant's transcendental unity of apperception. With reference to Schelling, however, the net result is that truth no longer requires "the establishment of perfect adequacy between intuition and concept," as Hegel himself still thought in the 1802/03 *System of Ethics* – where intuition would entail transcending the realm of conceptualization and thus rejoining the unity of the Absolute. This is a unity in which all distinctions, including that of subject and object that makes consciousness possible, are dissolved.[51]

[49] *Differenz des Fichte'schen und Schelling'schen System der Philosophie*, *Journal of Critical Philosophy* (1801). GW 4, 6.23–7.21; English trans. *The Difference Between Fichte's and Schelling's System of Philosophy*, trans. H. S. Harris and W. Cerf (Albany: State University of New York Press, 1977), cf. pp. 81–82.

[50] GW 9, 60.33–61.27. J. G. Fichte, *[Zweite] Einleitung in der Wissenschaftslehre* (1797). GA I.4.200. English trans., Daniel Breazeale, *J. G. Fichte: Introduction to the Wissenschaftslehre and Other Writings* (Indianapolis: Hackett, 1994), pp. 37–38.

[51] G. E. Schulze (the author of *Aenesidemus*, the first skeptical attack on Kant) was very likely an important catalyst in this distancing process. In 1801 Schulze had published a two-volume opus under the title of *Critique of Theoretical Philosophy* in which he again defended the standpoint of

There is no longer any need to invoke such cosmogonic imagery as that of the Absolute giving a sketch of itself in the idea ("in der Idee sein Bild gleichsam entwirft"), as Hegel invoked in 1801/02. Issues of truth are to be resolved within experience itself, on the basis of the adequacy of any given construal of reality for satisfying certain presupposed subjective interests. It is this subjective deepening of experience, clearly reminiscent of Fichte's *Wissenschaftslehre*, that made possible for Hegel the transition from logic, as a negative dialectical exercise externally applied to experience, to a phenomenology of experience. This was Fichte's contribution to Hegel – "*Fichtes Verdienst*," as Hegel said in an aphorism dating to the Jena period.[52]

But Hegel had gone beyond Fichte as well. The difference lies in how Hegel conceives the subject on whose series of representations the philosopher applies his reflection. For Fichte, that subject is presumed to be a

common sense and of theoretical skepticism. Hegel reviewed it in 1802, and Schulze responded to his review in the subsequent year with an anonymous essay entitled "Aphorisms Concerning the Absolute." In the essay Schulze skillfully parodied the Identity Philosophy of Schelling to which Hegel still clearly adhered at the time of the review. He pretended to be a disciple of Schelling and pretended to rely on Schellingian principles to criticize what was in fact his own skepticism. He argued, quite consequentially, that since in intuition there is no distinction between subject and object, and yet consciousness requires this distinction, the aim of the philosopher is to achieve a kind of semi-consciousness, a dreamy state so to speak, in which all distinctions are overcome and all doubts therefore disappear. This is the state of mind which Hegel himself was later to deride in the Preface to his *Phenomenology of Spirit* (1807). Using language strongly reminiscent of Schulze's, Hegel described it as a "night in which all cows are black" (GW 9, 17.28–29). Among the many factors that contributed to Hegel's becoming deliberately aware that he was parting company with Schelling, this anonymous publication of Schulze might well have been the most decisive.

For the relevant texts, see the following: G. E. Schulze, *Kritik der theoretischen Philosophie*, 2 vols. (Hamburg, 1801); [G. W. F. Hegel], "Verhältniß des Skepticismus zur Philosophie, Darstellung seiner verschiedenen Modificationen, und Vergleichung des neuesten mit dem alten," *Kritisches Journal der Philosophie* (1802), GW 4. English trans. in *Between Kant and Hegel: Texts in the Development of Post-Kantian Idealism*, translated with introductory studies by G. di Giovanni and H. S. Harris; revised edition, G. di Giovanni (Indianapolis and Cambridge: Hackett, 2000); [G. E. Schulze], "Aphorismen über das Absolute, als das alleinige Prinzip der wahren Philosophie, über die einzige mögliche Art es zu erkennen, wie auch über das Verhältniß aller Dinge in der Welt zu demselben," *Neues Museum der Philosophie und Litteratur*, ed. Friedrich Bouterwek, I.2 (1803), 110–148. Reproduced in *Transzendentalphilosophie und Spekulation: Der Streit um die Gestalt einer Ersten Philosophie (1799–1807), Quellenband*, ed. Walter Jaeschke (Hamburg: Meiner, 1993).

For a discussion of the episode and further relevant materials, see Kurt Reiner Meist, "'Sich vollbringende Skeptizismus': G. E. Schulzes Replik auf Hegel und Schelling," in *Transzendentalphilosophie und Spekulation: Der Streit um die Gestalt einer Ersten Philosophie (1799–1807)*, ed. Walter Jaeschke (Hamburg: Meiner, 1993), pp. 192–230.

[52] It is only in the recent past that this aphorism, jotted down by Hegel in a scrapbook which Rosenkranz entitled "Hegel's Wastebook," was recovered. It reads in full: "Only after the history of consciousness *does one know* through the concept [*durch den Begriff*] *what one has in these abstractions*: Fichte's contribution [*Fichtes Verdienst*]." For the aphorism and how it was lost, see Friedhelm Nicolin, "Unbekannte Aphorismen Hegels aus der Jenaer Periode," *Hegel-Studien*, 4 (1967), 9–19. For a description of the "Wastebook," see Karl Rosenkranz, *Hegels Leben*, pp. 198–201.

pure "I," that is to say, a *cogito* whose whole substance consists precisely in a thought thinking itself, and the sole interest motivating it (inasmuch as one can speak of "motivation" at all in this context) is self-expression. It is an act of unlimited freedom. But any such act, no less than Schelling's Absolute, would escape reflective comprehension. The only evidence for it is the immediate self-awareness that an individual subject presumably gains of himself inasmuch as he agrees to collude with Fichte in the thought experiment which is the *Wissenschaftslehre*. But this self-awareness is unexpressible and therefore ultimately ambiguous. It is an "interest in freedom" alone, therefore, that motivates Fichte's Science and also ought to motivate the commitment of every moral individual to interpret experience as a manifestation of a pure act of freedom.[53] Where Schelling relies on artistic intuition to bring his system to a close, Fichte relies on moral faith. Of course, that supposed freedom never becomes visibly incarnate. Nevertheless, experience is for Fichte not just a matter of *mere* appearance; its objects are not mere semblances of being, as they would have to be in Schelling's system of identity. In Fichte's system, the objects gain depth precisely by being failed attempts to attain the intended pure freedom. They are the products of a freedom *manqué*,[54] and they find their substantiality in precisely this missed goal. It is a negative substantiality, so to speak, but a substantiality just the same, and to this extent the source of a sort of self-satisfaction.

This last is the aspect of Fichte that Hegel could not accept and chided as a form of abstract subjectivism. Hegel's crucial move beyond Fichte is that he takes the subject on whose representations the philosopher exercises his reflection as a historical entity. The task of phenomenology is not to trace in experience the manifestation of freedom ideologically, that is to say, by virtue of a commitment to it in faith, but to do it historically – where by "freedom" Hegel now means nothing transcendent but, in a more transcendental vein, the power that reason demonstrates over nature by transforming what would otherwise be just something physical into an object, by humanizing it through labor, and ultimately by making it re-exist, as Hegel says in the 1805/06 System, as the object of art, religion, and science. Of course, Fichte too recognized this power of reason, but only in its negative aspect. He did not see that this is a power that bears positive effects, and that it attains its total goal in principle the moment

[53] J. G. Fichte, *[Erste] Einleitung in der Wissenschaftslehre* (1797). GA I.4.193–195. English trans., *[First] Introduction to the WL*, Breazeale, *J. G. Fichte: Introduction to the Wissenschaftslehre and Other Writings*, pp. 17–20.

[54] I am shifting into French to allude to the obvious similarities between Jean-Paul Sartre and Fichte.

reason comes on the scene. Like an *a priori*, spirit is either present from the beginning *in toto* or not at all. All that is to be added to its presence – but this is precisely the substance of experience – is for the historical subject to become explicitly aware of it, in effect, of recognizing that the social structures that he might have presumed to be the products of nature, and the accounts that he gives of nature, are in fact from the start the creative productions of reason. It might seem that Hegel is thereby totally devaluing nature. In point of fact, the opposite is the case. It is true that by interpreting nature as its pre-history, spirit invests it with a meaning which it would not otherwise have. But spirit's own content, or the determination of its various meaning-constituting activities, is itself determined by what that same nature happens to be before it is thus implicated in the life of spirit. Issues of truth are no longer, therefore, just a matter of telling a tale that satisfies spirit's subjective interests in spite of nature's apparent witness to the contrary, and even because of it – as it would be the case for Fichte. The satisfaction must be consummated in nature itself, albeit transformed by spirit. This means that the tale, while dictated by spirit, must be shown also to map onto nature as what is given.[55] Hegel's interest in nature was certainly fueled by the examples of Goethe and Schelling. But it acquired in his System a significance specific to him.

History is in Hegel's system the area where spirit and nature overlap. The *Phenomenology* is an account of this history from the standpoint of the historical subject's increasingly explicit consciousness of the work that spirit has already accomplished in nature. This is a progress that culminates with philosophy, as the idea that spirit has of itself. The book that Hegel finally published in 1807 thus answers to Hegel's 1801/02 definition of an introduction to philosophy. Philosophy is its own introduction because reason, which is its subject matter, is self-justifying. But, as an "empirical" (read: historical) product, philosophy is affected by a subjective (read: contingent) element which can obscure its nature to its own eyes and which therefore needs dissipating. The *Phenomenology of Spirit* is an account of philosophy as the latter came to the explicit consciousness of itself within the confines of that historical episode which we call Western Culture.[56] Its content covers in historical mode the content of the whole system,

[55] Thus prestige is to be gained at the price of risking death, and death is redeemed, not by denying it as a mere transition to another life, but by humanizing it by means of religious ritual. Cf. *Phenomenology of Spirit*, GW 9, 111.18–112.2; 224.14ff.

[56] The *Phenomenology of Spirit* has, and must have, a historical content. Whether one can map its course on to the actual course of the history of the Western world, or whether one should rather treat the book as historical fiction with a philosophical intent, is of course an issue of critical discussion.

and one can see how Hegel could have used the materials of its first three chapters in connection with his lectures on Logic in 1804, as Rosenkranz tells us.[57] In this respect, since the work is governed throughout by the idea of spirit, it also constitutes the First Part of the System of Science, as Hegel surnamed it in 1807. This is a title which was dropped in the second edition of 1832, because it no longer corresponded to the subsequent publication history of the then planned System, and because Hegel later incorporated a much abbreviated version of the Phenomenology in the Encyclopedia as part of the Philosophy of Spirit.[58] It is a title nevertheless appropriate to it, because the *Phenomenology of Spirit* does presuppose as its *a priori* the very idea which it is supposed to bring to explicit consciousness. In principle at least, therefore, it is already science. How the work can be both historical in nature and yet be governed *a priori* is a problem that has vexed its interpreters but need not concern us here. What does concern us here is the converse problem, namely how the Logic which the *Phenomenology of Spirit* presupposes can at once be logic and yet, *as logic*, require a history. Or again, restated in terms of the structure of Hegel's System, the question is how the Logic can be both the starting point of the System *and* its result.

THE IDEA OF THE LOGIC

Hegel's Logic has been interpreted in radically different ways. We shall turn to the more typical of these interpretations in the next section. As I have already indicated, I shall suggest here a way of reading it which is not uncontroversial but, precisely for that reason, will serve to highlight where the fault lines in the history of interpretation lie. On the face of it, Hegel's Logic has all the markings of a classical, pre-critical metaphysics. But this is a false impression, and our first task is to understand in what sense it in fact still falls within the compass of Kant's critical project. For this, we must further elaborate on themes already adumbrated.

The context

Kant's critical move was to approach experience from the standpoint of a subject who is engaged in it, and to take the mental space that this subject brings to it as the originative factor in the whole process of experience.

[57] *Hegels Leben*, p. 202.

[58] See the Preface (dated November 1831) to the 1832 edition of "The Logic of Being." GW 21, 9, Hegel's footnote.

It is its *a priori*. "Mental space" is of course only a metaphor, but an apt one. Just as physical space, as we normally picture it, makes possible the orderly juxtaposition of physical things, so the mind's representational activities, be they imaginative or conceptual, make possible the presence of these same things to the mind as objects. In this extended sense, they constitute a sort of space *sui generis* – a subjective *a priori*, according to Kant. Moreover, the metaphor aptly alludes to a number of other metaphors that Kant himself constantly uses, as for instance "the *realm* of empirical objects," or "the *kingdom* of ends." Now Kant distinguished types of this mental space. One is the space generated by the senses, a sort of bodily *a priori* in the medium of which objects are immediately or intuitively present to the subject of experience. Another is of a logical character, the product of a thought-reflection that defines the concept of an object in general. It defines the minimum that one must be able to say of an object (*Gegenstand*) if it is to be recognized sufficiently *as object* when intuitively given to the senses (if ever given) in the space generated by the latter. Kant's categories are the determinations of this concept.[59] The test of whether together they adequately define a recognizable object is whether, in deploying them as a means for sorting out and connecting together the otherwise undifferentiated content of sense intuition, a subject can retain in the course of experience a sense of self-identity – or again, whether the subject can retain a clear distinction between itself and what is given to it. This self-identity can be taken both abstractly as that of an "I think" in general, and more concretely as of a singular individual that makes his way across a field of experience and therein differentiates between his self and what is given to him. It can therefore also differentiate between the only apparently or merely *subjectively* given and the truly or *objectively* given. In either case, whether taken abstractly or concretely, the self can also be more than just an observer. It can be a *doer* as well, a generator of values, and its identity, therefore, is also a moral one. Here is where a third kind of space comes into play. This is the space of reason,[60] where one can think of what might be, or would have to be, and even ought to

[59] Cf. "Our cognition springs from two fundamental sources of the mind; the first is the receiving of representations (receptivity of impressions), the second is the power to [re]cognize an object through these representations (spontaneity of the concepts); through the first an object is *given* to us, through the second the object is *thought* with reference to that representation (as mere determination of the mind)." A50/B74. "[The categories] are concepts of an object in general" (*Sie sind Begriffe von einem Gegenstande überhaupt*). B128.

[60] "Space of reason" comes from Wilfrid Sellars's "Empiricism and the Philosophy of Mind," *Minnesota Studies in the Philosophy of Science*, ed. Herbert Feigl and Michael Scriven (Minneapolis: University of Minnesota Press, 1956), pp. 298–299.

be, as contrasted with what is given in sense experience *de facto*. It is the space where one can project the moral idea of a "kingdom of ends" and also the idea of what is for Kant the unknowable "thing-in-itself." This last idea is the one which his contemporaries found especially troublesome from the beginning, but which nevertheless played an indispensable role in Kant's system at all levels. This it did first of all at the theoretical level. The presence of the "thing-in-itself," as a presumed, empty yet fixed, external point of reference, allowed the experiencing subject to do both: gain the required subjective distance from his own experiences to recognize their subjective character while maintaining a sufficiently robust objective sense of "givenness" for their content by referring to it. The sense of "givenness" is made possible precisely by distinguishing between what are merely subjective impressions and what are, or can at least be interpreted to be, appearances originating in that irreducibly transcendent "other" which is the "thing-in-itself." Phenomenal objectivity might be limited objectivity, but it is objectivity nonetheless.

This is a minimalist account of Kant's critical project. But it is sufficient to understand how and why Fichte would feel obliged to reform it, and why Hegel found Kant's original project as well as Fichte's reform objectionable. For this, we must return to Fichte's *cogito*, or more accurately, to the thought experiment that Fichte urged on his auditors in order to gain entrance into his system.[61] The immediate occasion for the experiment was Fichte's desire to explain why in experience, in determining our objects, we feel constrained to abide by certain rules; in other words, why there is an *a priori* governing our experiences. As he asks, "But what is the basis of the system of those representations accompanied by a feeling of necessity, and what is the basis of this feeling of necessity itself?" And he immediately adds, "Another name for [this system] is 'experience' – whether inner or outer."[62] Whether one explains this "feeling of necessity" as originating in us because of the external influence of a "thing-in-itself," or as an internal *a priori* product of the *cogito* itself, marks the difference according to Fichte between those whom he calls "dogmatists" and the "idealists." To elaborate on this difference is Fichte's main preoccupation. But whether one follows one line of explanation or the other also makes a difference in how one interprets the sense of "being merely given," or of mere facticity, that characterizes in experience the first presence of its objects.[63] This is a

[61] *[First] Introduction to the WL*, pp. 7–8; GA I.4.186–187.

[62] *[First] Introduction to the WL*, p. 8; GA I.4.186.

[63] I am borrowing the term "facticity," *Faktizität*, from the Fichte of 1810. For instance: "Wenn wir bis zur Erklärung dieser Fakticität selbst uns emporschwingen werden, dann werden wir vollendet

feature which we tend to attribute to these objects in abstraction from the subject experiencing them but which in fact implicates the latter from the start, for it denotes a dissatisfaction on the subject's part regarding their presence. It is as if this presence constituted a check on the subject's attempt at controlling *a priori* the space of experience. It therefore generates for the subject both a sense of irreducible "otherness" with respect to the objects and equally the need to transcend this sense – to explain it away.[64] This is the point of Fichte's claim that in experience "form and content are not two separate elements."[65] Now Fichte strenuously wanted to believe that this was also Kant's position.[66] But he was very well aware that when defining the meaning of "being given" – of phenomenal *data* – Kant had relied on the then universally accepted scholastic model of the mind, connecting it with sense impressions whose character was presumed to be essentially passive. But the model provided at best a psychological rather than a critical explanation of "impressions," and it had the unfortunate side-effect of making Kant's theory vulnerable to dogmatic interpretations. His notorious "thing-in-itself," instead of being understood as an ideal term of reference that generates a universal space of reason and is itself a function of the *cogito*, could be taken instead – as in fact it was by many contemporaries – as a sort of hyper-physical entity that externally inflicts on the subject of experience effects over which the latter has no control. In a critical context, however, any appeal to causality, besides being inconsistent with Kant's critical restriction of it to the realm of phenomena (as Aenesidemus had stridently argued),[67] would have had to fall on the

haben" ["If we soar upwards to the explanation of this facticity, then we have come to the end"], WL – 1810, GA II.11: 309.19–20. For a fuller discussion of this aspect of Fichte, which becomes even more prominent after 1800, cf. George di Giovanni "Sacramentalizing the World: On Fichte's Wissenschaftslehre of 1810," in *Grund- und Methodenfragen in Fichtes Spätwerk, Fichte-Studien*, 31, ed. Günter Zöller and Hans Georg von Mainz (Amsterdam and New York: Rodopi, 2007), 219–233.

64 Cf.: "Indeed, something becomes contingent for someone precisely insofar as he inquires concerning its basis. To seek a basis or reason for something contingent, one has to look towards something else, something determinate, whose determinacy explains why what is based upon it is determined precisely the way it is . . . " *[First] Introduction to the WL*, p. 9; GA I.4.187, §2.

65 *[First] Introduction to the WL*, p. 28; GA I.4.202.

66 Cf. *[Second] Introduction to the WL*, p. 71; GA I.4.486. But perhaps in this whole passage Fichte is protesting too much for one who professes to believe in Kant unreservedly.

67 Schulze, G. E. [anonymous], *Ænesidemus, oder über der vom Herrn Prof. Reinhold in Jena gelieferten Elementarphilosophie, nebst einer Verteidigung gegen die Anmassungen der Venunftkritik* (1792), p. 155; English trans. in Giovanni and Harris, *Between Kant and Hegel*, p. 122. Jacobi is generally believed to have been the first to have raised this objection in his Appendix to the dialogue *David Hume* (1787). But in fact his position is much more sophisticated, for Jacobi does not object to the categories being applied to the "thing-in-itself," provided that they remain non-schematized. His point is rather that, because they remain non-schematized, and "thing-in-itself" thus remains a mere idea, Kant cannot

side of a physiological pre-history of experience. It did not explain the phenomenon of brute presence precisely as phenomenon, that is, as an experiential fact of consciousness.

It was to remedy this failure that Fichte undertook his thought experiment, asking his auditors to think simply for the sake of thinking and to reflect on the result. The attempt was intended as an expression of pure freedom. But the result, as reflectively apprehended, had to be a failure – not just because, as a matter of fact, one cannot think without actually thinking *something* in particular, but because the difference between the intended infinite thought and the thought (now an object) *de facto* finitely apprehended is precisely what creates the distance between the subject of experience and his object that makes the experience a conscious one. Without that distance, there is no consciousness. The failure was not, therefore, an unqualified one. For on the assumption that the expression of freedom is the interest motivating all experience, or in more concrete terms, provided that one sees one's own existence in experience as a protracted attempt at self-contained activity, then the fact that in these activities one cannot but take into consideration what at least appears as extraneous circumstances is felt indeed as a constraint, but a constraint which, no less than the formal rules that govern the experience of those circumstances, is itself the product of the original *cogito*. Without the original attempt at purely autonomous activity, there would be no sense of "being constrained." The net result is that the whole realm of experience becomes colored with a moral tinge, exactly what Fichte had of course intended from the start. Experience is a call to transform the otherwise merely brute facts of experience into products of freedom, a call to re-do nature after the image of the Absolute. And this is a process that requires remembering that the "bruteness" of those facts is itself the first product of freedom.[68]

escape absolute subjectivism. On this point, see Birgit Sandkaulen, "Das 'leidige Ding an sich': Kant – Jacobi – Fichte," in *Kant und der Frühidealismus*, ed. Jürgen Stolzenberg (Hamburg: Meiner, 2007), 175–201. For an English translation of Jacobi's dialogue, see *Friedrich Heinrich Jacobi: The Main Philosophical Writings and the Novel Allwill*, translated with an Introductory Study, Notes, and Bibliography by George di Giovanni (Kingston and Montreal: McGill-Queen's Press, 1994); includes G. di Giovanni, *The Unfinished Philosophy of Friedrich Heinrich Jacobi*, pp. 1–167.

[68] "Nature must gradually be resolved into a condition in which her regular actions bear a fixed and definite relation to that which is destined to govern it – that of man . . . Thus shall Nature ever become more and more intelligible and transparent . . . " *Die Bestimmung des Menschen, dargestellt von Johann Gottlieb Fichte* (Berlin: Voss, 1800), pp. 182–183. English translation, *The Vocation of Man*, trans., ed. Roderick M. Chisholm (New York: Bobbs-Merrill, 1956), pp. 103–104. For an extended discussion of this work, see George di Giovanni, *Freedom and Religion in Kant and His Immediate Successors: The Vocation of Humankind, 1774–1800* (Cambridge: Cambridge University Press, 2005), Chapter 8.

Fichte accomplishes this work conceptually, in accordance with his vocation as a philosopher. In an important sense, the work still falls within the compass of Kant's Transcendental Logic, namely inasmuch as its intent is still to produce *a priori* the concept of an object in general or of generating *a priori* the conceptual space that makes the recognition of an object possible. But there is also an equally important difference. In Fichte's *Wissenschaftslehre*, Kant's need to validate the categories by demonstrating that they are found realized in sense experience – the need of a Transcendental Deduction, in other words – no longer arises. To make the point in Kant's terms, Fichte had relativized the distinction, which for Kant was absolute, between understanding and reason.[69] He had extended to the whole realm of experience the claim that for Kant applied unqualifiedly only to the moral realm, namely that conceptualization is essentially a norm-setting function, and that it is therefore wrong to try to validate its products by measuring them against any *given* state of affairs. Or again, Fichte was taking seriously Kant's own theoretical claim that nature is an idea, and that one must approach experience with questions in hand, coercing it to yield already well-rehearsed answers. The idea of construing objects of experience by *applying* categories to a presupposed given content loses all meaning, except perhaps in some artificially restricted context. One must rather *interpret* experience by making sense of its otherwise merely given content in terms of *a priori* conceptual constructs which, though evoking actual situations, draw the only possible content appropriate to them from their place in a system of such constructs, or from experience itself as already idealized. What Kant had said of "respect for the [moral] law," namely that it is the only case of a feeling which is determined *a priori* by reason,[70] now applies across the whole realm of experience.

Starting from his opening interpretation of the meaning of facticity, Fichte proceeds methodically in his *Wissenschaftslehre* to deduce a whole system of the said constructs, both theoretical and practical. But because of the nature itself of the overall project, the interpretation of experience that they provide at each step must remain to the end *only* interpretation, never totally absorbing the factual content it interprets, that is to say, never quite dissolving its facticity. This is of course the price to be paid for setting as the norm of truth the attainment of a freedom which, if ever

[69] "For a full-blown idealism, *a priori* and *a posteriori* are not two different things, but are one and the same thing, simply looked at from two different sides, and they can be distinguished from each other only in terms of the different means one employs in order to arrive at each." *[First] Introduction to the WL*, p. 32; GA I.4.206.

[70] AK V.76.16–17.

attained, would transcend consciousness altogether – the price for making the abstractive power of reflection a wider and prior mental space than the physical one of being. The phenomenon of facticity is the net result of precisely this abstractive move. There is, therefore, as we said earlier, a kind of moral satisfaction in the dissatisfaction with any given situation which is felt at the level of individual immediate experience. In a Fichtean moral context, that dissatisfaction is itself an indirect witness to the seriousness of one's moral commitment to absolute freedom.[71] And there is yet another price to be paid for the same abstractive move, also at the individual level of experience. At that level, the gap between interpretation and *de facto* experience is ultimately to be filled by pragmatics. It is done with the needs of the moment as the final determining ground – though with one's professed interest in freedom as the subjective guarantee that one is acting rightly. The consequence for Fichte's project as a whole is that, although the *Wissenschaftslehre* is a work of conceptualization and therefore of logic, even *as logic* it is dependent on a phenomenology of the historical individual responsible for it. To use an expression of Fichte, it is dependent on "pragmatic history": at the beginning, where reflection is the moving force, on the individual's self-expression in a free but abstract "I"; and at the end, where action is the issue, on the freedom-inspired rhetoric that finally fills the gap between interpretation and singular moral judgment. It is not by chance that Fichte repeatedly lapses into sermonizing.[72] In the end, the logic of his Science naturally gives way to rhetoric.[73]

We are back to the theme of abstract formalism and subjectivism that preoccupied Hegel in the Jena years. On Hegel's analysis of both Kant and Fichte, the problem is that the "I" that figures so prominently in their theories is too abstract a product of conceptualization. It *means* to say much but in fact *says* nothing. Therefore, according to Hegel, it lets the content of experience for which it is supposed to provide the unifying space, its conceptual *a priori*, escape from it and fall, so to speak, on the side of a beyond from which it is retrievable only by means of such non-conceptual means as intuition. But intuition, whether of the Kantian or the Fichtean type, is ultimately inexpressible and therefore a source of irrationality. This is not to say that Hegel does not recognize that facticity is an irreducible

[71] Kant had said something not dissimilar. "Hence we can see *a priori* that the moral law, as the determining ground of the will, must by thwarting all our inclinations produce a feeling that can be called pain; and here we have the first and perhaps the only case in which we can determine *a priori* from concepts the relation of a cognition (here the cognition of a pure practical reason) to the feeling of pleasure or displeasure." AK 5.73.

[72] Cf. note 68 above.

[73] On this ground, Fichte might indeed deserve indeed the title of being the first post-modernist.

element of experience. This is the lesson that he had indeed learned from Fichte. Hegel's canonical term for it, about which more in just a moment, is "immediacy." But the point is that such a facticity, this immediacy of experience, ought to be absorbed conceptually even *as* facticity. It has to be comprehended positively. To avoid Fichte's inevitable slide from logic into rhetoric, one needs a kind of conceptualization that permeates that facticity. And if Hegel did not want to travel the way of Schelling, which would have taken him to a pre-Kantian Spinozism, then the only avenue still open to him was to comprehend facticity discursively, without intuition or myth-making. How this is to be done is the problem of the beginning of the Logic.

The beginning

Nothing seems as simple, as irrefutable, and yet as unconvincing, as Hegel's opening argument about the concepts of "being" and "nothing" – that they shift into one another, and that their play of mutual replacement is finally resolved into a third concept of "becoming." In the context just defined, however, these moves do make sense. The problem is still that of Kant's Transcendental Logic, namely that of determining the least that must be said of an object (*Gegenstand*) in order to recognize it sufficiently as such. But Kant and Fichte had begun by saying too much – Kant, by introducing a schema of ready-made categories which he had neither derived nor would further develop; and Fichte, by promoting freedom as an avowedly extra-conceptual cause. And for this reason, as we have just seen, they incurred the formalism and the subjectivism that Hegel decried in them. Most of all, they failed to see that the truth of an object (*Gegenstand*) is only to be found in the discourse about it, so that any opaqueness as to what that object is, or whether it is at all, must be resolved from within the original discourse itself by developing it according to rules internal to it.[74] There is no exit from language. This is the central point of Hegel's position and the meaning of his repeated claim that the content of discourse is generated by its form.[75]

[74] Of course, "discourse" and "saying" are to be understood here in a logical context, that is, as meaning-generating performances in which the *flautus vocis*, though never dissolved, is nevertheless absorbed into the meaningful intentions that language conveys. This is not to say that it is not appropriate to distinguish between verbal sounds and concepts, or between "speaking" and "thinking," or to enquire how the two are interconnected. But these are psychological reflections that belong to logic, if they belong to it at all, only accidentally.

[75] This is also the meaning of Hegel's repeated claim in the *Phenomenology* that much of the language that we ordinarily believe to be descriptive statements about things is in fact already reflective, that is to say, implicitly contains a judgment about how, and to what extent, we truly apprehend a

Any judgment regarding a subject matter contains a comment on what has already been said or has been left unsaid about it. The subject matter of the Logic is not the "thing-in-itself" or its phenomenal manifestations, whether one conceives its "in-itself" as a substance or as freedom, but is discourse itself. Hegel's thesis is that, starting from the least that one can say about an object in general while still making sense, one can proceed to identify sets of predicates, namely the categories, each of which defines the limits of a type of discourse suited to a certain subject matter. Each set is arrived at by virtue of a reflection upon the prior, a reflection that makes explicit and formally introduces into a new type of discourse the logical determinacy that was still missing in the one preceding it and therefore made its subject matter still unintelligible (or, more precisely, relatively unintelligible). The Logic itself is a discourse about discourse – the only discourse which, because of its subject matter, can attain perfect completion and which, therefore, defines the norm of intelligibility against which all other types of discourse, all of them more or less open-ended in their own spheres, are to be measured.

I shall say more about how the Logic unfolds. The important point right now is that Hegel's Logic does not proceed from the formal to the real, where the "real" is the "given" as in Kant's Transcendental Analytic; nor does it proceed from the theoretical to the practical, where the "practical" arises from the challenge that the facticity of experience, as interpreted in Fichte's *Wissenschaftslehre*, poses to freedom. On the contrary, the progression is from the abstract to the concrete, or more graphically, from a first delineation of the intelligible space of reason to a full discourse about it. There is never an exit from either the logically formal or the theoretical. Accordingly, the notes of "givenness" and "facticity" lose in Hegel's Logic the systematic significance that they respectively had for Kant and Fichte (though they may well still retain limited applicability in limited contexts). "Immediacy" is the note that replaces them. Immediacy is a feature that affects logical discourse at every stage of its development. It is a measure of the indeterminacy that that discourse still harbors at any particular stage because of the limitations of the specific set of categories that define it at that stage; it is "*das Rest*" of those categories, their still unintelligible residue that the next set will have to absorb by reintroducing it as a moment of the form governing the following type of discourse. These, such distinctions as those between "abstract" and "concrete," "immediate"

supposed thing. For instance: "It is clear that the dialectic of sense-certainty is nothing else but the simple history of its movement or of its experience, and sense-certainty itself is nothing else but just this history." GW 9, 68.34–36.

and "reflective," "material" and "formal," are the factors that govern the movement of Hegel's Logic essentially. And they are all implicated in a further distinction that Hegel introduces unobtrusively, and one that tends to be lost in English translation, but which in fact controls the development of the Logic from beginning to end. This is the distinction between *Gegenstand* and *Objekt*, and between their derived abstract nouns *Gegenständlichkeit* and *Objecktivität* – a translator's nightmare, since the dictionary translation of both terms and the derived abstract nouns are the same: "object" and "objectivity." The distinction between *Gegenstand* and *Objekt* coincides roughly with the scholastic distinction between "material" and "formal" object or, in an ordinary epistemological context, between a "subject matter" as merely intended or merely representable[76] and as actually made present in representation. As actually made present, the "subject matter" is of course made intelligible (that is, it is made to exist *for* an intellect),[77] and it is so made intelligible by being represented from the special formal standpoint of some discourse or other (as when we speak, for instance, of the subject matter specific to a science).[78] In the language of Hegel's *Phenomenology*, the *Objektivität* of a *Gegenstand* is its truth, its intelligible content. In the Logic, the *Gegenstand* or the subject matter is the *Objektivität* itself of any *Gegenstand*, or the possibility of intelligibility in general. Yet a distinction still emerges between the two because of the immediacy just noted that affects the logical discourse at its various stages and still constitutes an area of the "unsaid" within what is actually "said." It is only at the end, when the logical process turns upon itself and its various stages are explicitly determined as constituting the particularized content of the "idea," that "subject matter" and "object," *Gegenstand* and *Objekt*, formally coincide.

We are getting ahead of ourselves, since it is with the beginning of the Logic that we are concerned here. Yet another general point is also to be made. As Hegel takes us systematically across the content of his Logic, he tacitly assumes and makes use of a psychological model which he borrows from Kant and Fichte and which these had borrowed in turn from a long-standing scholastic tradition. The transition from the first to

[76] *Vorstellbar*. Here "representation" must be taken in its wide sense and not as opposed to "concept." See the discussion of the term below under "Issues of translation."

[77] In the late scholastic language of Cajetanus and John of St. Thomas, the object would be the *ratio quod* of the subject matter. Cf. Johannes a sancto Thoma, *Cursus Philosophicus*, ed. B. Reiser (Turin: Marietti, 1930), *Quæstio* 27, *art.* 1. English trans.: *The Material Logic of John of St. Thomas*, trans. Y. Simon, J. J. Glanville, and G. D. Hollenhorst (Chicago: Chicago University Press, 1955), especially p. 555.

[78] This standpoint is the object's *ratio formalis sub qua* of late scholasticism.

the second and third part of the Logic is a progression from the things of the senses to those of the understanding, and finally to those of reason. These are distinctions on which Hegel openly relies. However, as used in the Logic, such terms as "senses," "understanding," and "reason," must be understood in a wide sense to mean degrees of intelligibility, or as denoting types of objectivity possible in a subject matter. Any psychological or even phenomenological connotations that they may carry are strictly accidental. Also to be understood is that each forward move in the progression of the Logic is just as much a regression – in the sense that what is being determinedly explicated at any stage are the conditions of intelligibility that were already implicitly at work at a prior stage and that *de facto* made its specific type of objectivity possible. It follows that at the end, when all these conditions are fully explicated in the "idea of the idea," what is being logically comprehended is the mental attitude, the rationality, that must be at work in experience from the beginning. It has to be at work if even as simple a judgment as Hegel subjects to critical reflection at the beginning of the *Phenomenology*, if even as simple as a "There it is!," is to make any sense. Either rationality is present from the beginning *in toto*, or it is not present at all. And this is another way of repeating that for Hegel there is no exiting from discursiveness.[79]

One can understand, therefore, Hegel's opening moves in the Logic. They are simple and yet profoundly programmatic. They are simple moves because in the two concepts that are expressed by saying "being" and "nothing," Hegel says all that we could possibly say of whatever we would apprehend in intuition, whether the intuition is of the senses or (if there is one) of a pure thought,[80] namely that it is nothing determinate. Whether we interpret that "whatever" as "being" in the positive spirit of a Spinoza or a Schelling, or as "nothing" in the negative spirit of a Fichte who required that we step outside "being" in order to begin science, the result amounts to the same: "being" empty of content and therefore determined as "nothing," and "nothing" determined as "being" (empty being) in order to have meaning even as "nothing." The two shift into one another. And the moves are also profoundly programmatic because it is not with a mere void that they leave us, as we would be left by any intuition, a void for which we would then be required to import a conceptual content from outside. The resulting indeterminacy is contained within "being" and "nothing"; it is *their* determinacy, or the first determination of the subject

[79] Except in death, of course, whether of an individual or of a community.

[80] Perhaps we do have "intellectual intuition," though I do not believe that we do. But the point is that it has no purchase unless it is put into words.

matter of the Logic as originatively adumbrated in these first moves. Since we are dealing here with the simplest of all possible expressions, it is of course difficult to avoid overt metaphors in order to speak about them, and Hegel's own advice is, accordingly, not to say much at all. An apt metaphor nevertheless, especially if we remember that *Bestimmung* means in German both "determination" and "vocation," is to say that "being" and "nothing" are a call for determination: *that* call is their determinacy. Or to revert to the image of a space of reason, "being" and "nothing" define together a space of discovery. There is nothing irrational about the immediacy of their content, or better of their "non-content"; nothing in principle refractory to conceptualization but the first delineation, rather, of how to set in motion the process of conceptualization that will fill in their indeterminacy.

For yet another reason, therefore, these first moves are profoundly programmatic. The first and simplest expression of this determinacy which the indeterminacy of both "being" and "nothing" together constitute is "becoming." Hegel introduces this category at this point. But in thus advancing to it, he is at the same time also taking a first step backward in recovering a more concrete delineation of the eventual full logical discourse of which "being" and "nothing" are but ephemeral moments. "Becoming" is the first self-contained category, of which "being" and "nothing" are only abstractive moments. In assuming this position, Hegel is in fact taking a stand against the whole tradition of Western metaphysics, a tradition that dates at least as far back as Parmenides, and of which Spinoza was at the time the latest, most obvious representative. Hegel privileges "becoming" over "being." It is not "becoming" which is the source of irrationality, but the attempt rather to treat "being" by itself, in abstraction from "nothing" and from the "becoming" which is the matrix of both. It is only inasmuch as "being" is conceived as being whatever it is by *becoming it* that it retains identity, while at the same time remaining open to a number of possible determinations which it nonetheless contains within according to a rule internal to it. But this is the formula for rationality. And indeed, the best instance of "becoming," the one against which we in fact measure the internal adequacy of other processes of becoming and from which all our language of becoming is drawn, is precisely the discursiveness of our discourse – as when a theme, though perhaps declared abstractly at the beginning of a story, finds its content only in the details of that same story which it controls, and it truly develops by returning at the end to its beginning in the form of a full story. But the perfect discourse, according to Hegel, is that of the Logic. Hegel is orienting himself to this conclusion

even with his first moves. We must now consider some of the details on the way to that conclusion.

The development

(1) I have been deliberately using "discourse" and "discursiveness" instead of "dialectic" (a term, incidentally, that Hegel uses sparsely in the Logic) in an attempt to demystify the latter term. But it should be clear that the meaning is the same.[81] Now, taken precisely "in becoming," being can first be determined as what it is rhapsodically, that is, qualitatively, in one "what," then in another, and so on, each "what" never constituting anything definitive. The logical problem is to hold these "whats" together, to make a discourse of them – in effect, to give a first, better delineated definition of the unity which is possible in becoming. Here is where Hegel makes several conceptual moves, introducing among others the concepts of "finitude," "limitation," and "infinity." With this last, with "infinity," a turning point is reached. As conceived by Hegel, the "infinite" is being inasmuch as, in being whatever it is (and this could be an indefinite series of "whats" – a "bad infinite," as Hegel calls it), it remains by itself, or is now definable, in Hegel's terminology, as "being-for-itself." The turn consists in the fact that, from now on, the conceptual stress is no longer on "what" a being happens to be but on its retaining unity (in its abiding with itself) regardless of what it might otherwise be as a "what." This "abiding with itself" can of course acquire both the meaning of "continuity" and "discreteness." The further move from the categories of "quality" to those of "quantity" is thereby secured. Even though our most elementary talk about things is unreflectively carried out in qualitative terms, the truth of that discourse, or the more determinate concept of the being which is its subject matter, is defined by the categories of "quantity."

(2) These categories divide into "quantity" as such, "quantum," and "measure." As quantified, being is said to be constituted of parts that can be taken as both continuous and discrete, and there is in principle no end to how many such parts can be generated by reflection. These parts are "quanta." Now, something analogous was also already said of being as qualitatively determined, except that instead of "*quanta*" one had to speak of "*qualia*," of "whats." The play between quantitative parts which, as such, can both run into one another and yet also fall apart, was also

[81] Etymologically, "discourse" does not derive from διάλεξις, which has the more specific meaning of "dialogue" or of *disputatio*. But "dialogue" is a type of "discourse."

already played out in terms of the "some" and the "some other," the "one" and the "many," their reciprocal connection ultimately one of "attraction" and "repulsion." It was precisely this qualitative play that made possible the transition to "quantity." But the difference is that what counts most in "quantity" for the determination of a being is the *rule* by which this play is carried out. True: the "quanta" that make up that being, inasmuch as they are taken as single terms subject to external calculation, still have to be qualitatively determined in order to be individually picked out for the calculation. That is to say, they must be immediately presupposed. As thus presupposed, however, they are from the start already in principle relegated – to anticipate now a category that comes into its own only as a result of the dialectic of "quantity" – to the "unessential." Only as implicated in a referential play of terms carried out according to a rule, and deriving their magnitude from this play, do they denote the new unity of formal determination that "being" has now acquired. Progress in the development of quantity is measured precisely by the extent that the rules determining the play, rather than just presupposing its terms globally and/or singly, also determine the range within which they can enter into that play, to the point that the play itself generates the terms that enter into it. Such are the mathematical ratios. Hegel takes them in order: direct ratio, $y/x = k$; inverse ratio, $xy = k$; and the ratio of powers, x^2 or $x^x = k$.

Here is where Hegel introduces the new category of "measure" which explicitly expresses the *de facto* situation that has just developed and is fully realized in the ratio of powers. Reflected in his treatment of this category, and in the terminology that he uses for this purpose, is the discussion on the nature of calculus, and its place in the study of the sciences of nature, that had gripped the attention of the learned world in the eighteenth century and which was also the object of Hegel's own reflection throughout his intellectual development. Hegel's point, in brief, is this. In a ratio, the terms that enter into it are measured against each other. As single terms, they do indeed still carry immediate qualitative determination – and to this extent, therefore, they are still open as objects to external determination. But the important point is that, whatever the qualitative determination of such single terms, their stipulated measure persists, internally resistant to any external manipulation. Because of this resistance, their objectivity (originatively defined as "being") acquires yet another level of formal self-containment, another "for-itselfness." Hegel can say, accordingly, that with "measure" there is a return to "quality." But the return is with a crucial difference, for the net result of the internal resistance

posed by "measure" is that the qualitative differentiation of the terms that enter into it – an immediate differentiation that belongs to "quality" in general as a first immediate determination of "being" – becomes to it a matter of *indifference*. In the form of "measure," in other words, "quantity" has absorbed the indeterminateness that was the determinateness of "being" as "quality," and "being" itself, therefore, has acquired a depth that it did not have before. "Quality," as it now comes into play again, signifies this new depth – this enhanced self-containment – that the logical object has achieved. It has begun explicitly to contain the immediacy of its becoming, and with this the forward transition to "essence" has in principle already been made.

(3) This is the place to consider two additions made to the 1832 edition of the Logic. They are the exceptions to which we alluded in the Prologue. The first is the much longer discussion (now in three Remarks as contrasted to the earlier one) which immediately follows upon the treatment of "quantum," and which anticipates the point that Hegel will then formally develop in the sections on "ratio" and "measure." These Remarks also contain Hegel's criticism of how mathematicians and philosophers, past as well as current, and including even those who had contributed to the creation of this new form of calculation, had in fact misunderstood the nature of their own creation. For this reason, they had been unable to explain the peculiar advantage that it offered over other forms of calculation, namely that on the basis of admittedly indefinite quantities it can achieve very definite results. What they had failed to notice was precisely the extra qualitative character that "quantity" assumes in the course of its internal conceptual development and of which calculus, as Hegel now argues, gives a perfect illustration. Central to his argument is a repeated reflection on the nature of the "true infinite" already defined in connection with the category of the "for-itself."

In brief, this is his argument.[82] There are actual infinites, that is, magnitudes that cannot be numerically exhausted but of which we nevertheless have clear and distinct concepts. Spinoza, to whom Hegel duly refers, had

[82] GW 21.236ff. I must acknowledge in this connection a number of studies on Hegel's reflections on mathematics and calculus that I have found especially instructive: David Gray Carlson, "Hegel's Theory of Quantity," *Cardozo Law Review*, 23.6 (2002), 2027–2155; "Hegel's Theory of Measure," *Cardozo Law Review*, 25.1 (2003), 129–213; Antonio Moretto, *Hegel e la "Matematica dell'infinito"* (Trento: Verifiche, 1984); *Questioni di filosofia della matematica nella "Scienza della Logica" di Hegel* (Trento: Verifiche, 1988); *Filosofia della matematica e della meccanica nel sistema hegeliano* (Padua: il Poligrafo, 2004). A deflationary view of Hegel's Remarks on calculus is that of Clark Butler who suspects "Hegel of wishing in part to demonstrate his mastery of mathematics and science to contemporaries and colleagues." *Between Dialectic and History*, pp. 110–111.

already made this point.[83] Take two unequal circles, the smaller contained within the larger without touching it and the two non-concentric. Of the segments generated by the two circumferences intercepting the lines drawn from the center of the smaller circle to the outer circumference of the larger circle (and contained in the space between the smaller and larger circle), there is a longest and a shortest (where the two centers lie on the same diameter). For each segment lying between these two limits, however, there is another next to it unequal to it by an infinitesimally ever smaller or greater magnitude, though never exceeding in the direction of either smaller or greater the difference between the two set limits, and there is no number that can express *all* the inequalities thus generated. We are confronted here with an "all" for which the usual concept of quantifiability by means of number no longer applies, but which is clearly and distinctly definable. The "all" is the actual infinitude of the inequalities of the segments contained between the two stated limits within the space generated by the two circumferences – an "all" which, as so defined, though infinite is nonetheless actual and perfectly identifiable. This a perfect figurative illustration of what Hegel means by a true infinite as contrasted with a "bad" or indefinite infinite.

In Spinoza's illustration, this infinite is represented figuratively, still in the manner of classic Euclidean geometry. But suppose that we try to represent it analytically as it is done in calculus, visually charting on a graph the course of the increments or decrements of the segments one by one, granted the stipulated limits. The infinitesimal change in magnitude between increments or decrements is neither a null nor a definite quantum: "dx" and "dy" cannot be named. But this does not mean that the course of the graph cannot be accurately charted or any point within it not precisely calculated, for although "dx" and "dy" cannot be named, "dx/dy" can. That is to say, although the infinitude of the terms charted by the graph cannot be exhaustively enumerated (and would give rise to a bad infinite if one tried), given any of them as chosen at random on the basis of external considerations, any other can be exactly determined as measured against it according to the rule governing the graph. The numerical, quantitative indeterminateness is determinedly contained by that rule. This is exactly the point that Hegel develops in connection with "ratio" and "measure," which he introduces following the three Remarks, and sums up by claiming that "measure" marks a return to "quality" (though a

[83] Cf. GW 21, 247.24ff., and Spinoza, *Epistolæ*, Nr XXXIX, Nr XII in the Gebhardt numeration: Benedictus de Spinoza, *Opera*, ed. Carl Gebhardt, 4 vols. (Heidelberg: Winter, 1925).

return with a difference). Now, using the still figurative language that Newton and Leibniz had put into circulation, the mathematicians of Hegel's day referred to the infinitesimal difference between term and term on the graph as an "evanescent moment," and they took it to be a quantum so minute that, in the course of calculation, it can at some point be left out of consideration without adverse consequences. But they were then left in the embarrassing situation, with which Hegel confronts them, of having to explain how accurate results (and their calculations were indisputably exact) could be obtained on the basis of avowed approximations,[84] or, as some of them argued, how rigor of demonstration could be maintained by the accidental balancing out of contrary errors.[85] What they failed to see is that when duly developed "quantum" transcends the limits of "quantity." Calculus, according to Hegel, was a clear instantiation of this overreaching of "quantity."

This is the first addition. The second is much shorter, but arguably more subtle and certainly more surprising, and consists of a long passage introduced in the prefatory comments to the section on "measure."[86] It comes as a surprise and it is generally considered by commentators to be out of place because it deals with the categories of modality, whereas modality formally falls within the purview of "essence."[87] It is directed at Kant, whom Hegel criticizes for assigning to the modal categories an especially subjective status. All of Kant's categories are of course subjective. They define an object which is mere appearance by assumption. In the case of "contingency," "possibility," "actuality," and "necessity," however, Kant adds the further qualification that they say nothing at all about the content of the object (even as phenomenal) but define rather the relative distance that obtains in experience between the concept and the intuition of it. As categories, they are the exclusive function of our subjective (discursive)

[84] Hegel singles out for his disapproval the explanation of Christian Wolff who compared the ignoring of higher order infinitesimals to the procedure of a surveyor who, in measuring a mountain, is not any less accurate just because the wind has in the meantime blown a speck of sand off from the top. GW 21, 256.

[85] GW 21, 263–264.

[86] GW 21, 323–326. For a detailed discussion of the changes between 1812 and 1832 in Hegel's treatment of the double transition from "quality" to "quantity" and from "quantity" back to "quality" and of his appreciation of the meaning of this double transition, and also of the possible disparity that these developments cause between the conclusion of the 1832 Doctrine of Being and the beginning of the 1816 Doctrine of Essence, see Cinzia Ferrini, "Logica e filosofia della natura nella dottrina dell'essere hegeliana I," *Rivista di storia della filosofia*, 4 (1991), 701–735; "Logica e filosofia della natura nella dottrina dell'essere hegeliana II," *Rivista di storia della filosofia*, 1 (1992), 104–124; "On the Relation between 'Mode' and 'Measure' in Hegel's *Science of Logic*: Some Introductory Remarks," *The Owl of Minerva*, 20.1 (1988), 21–49.

[87] Cf. Ferrini, "Logica e filosofia della natura nella dottrina dell'essere hegeliana I," pp. 722–723.

way of apprehending objects. If, *per impossibile*, we had an intellectual intuition of these objects, the modal categories would lose all meaning.[88] In this respect Kant is not unlike Spinoza, to whom Hegel also refers. Also for Spinoza they are ultimately the product of ignorance. Now, in his additions, Hegel is taking issue with precisely this position. "Quantity," especially when understood as "measure," entails a distinction that explicitly obtains within the structure of the being which it determines – namely the distinction between this being as consisting, on the one hand, of a "bad" infinity of determinations, and as providing, on the other, an internal rule by which it contains such determinations and governs (as need be) the progress of their enumeration. It is this distinction, and the distance that it creates within being between outer indefinite determination and inner determining rule, that, as Hegel now implies, is the first adumbration of the modal categories later to be officially discussed in the context of the "Doctrine of Essence." In connecting them with his present treatment of "measure," Hegel is proleptically shedding these categories of the purely subjective meaning that they had for both Spinoza and Kant. We have already noted how the philosophy of nature is never far away from Hegel's mind. Hegel is certainly not committing himself here to any particular theory of nature. Nor, for that matter, is he renouncing his belief that the things of nature ultimately lack the internal stability that would make them intelligible on their own terms – his belief that, in order that they become objects of scientific knowledge, the concept must step in and provide by means of theoretical constructs the stability that they otherwise lack *per se*. This being said, it is nonetheless clear that Hegel is supplying here the logic of a scientific language that would allow physical things to have at least an inchoate internal principle and, therefore, at least a relative control over their process of determination. Hegel, in other words, is still pursuing his Jena agenda of allowing for the things of nature to have the depth that the phenomena lack in the idealism of both Kant and Fichte. All this is on the assumption, of course, that such things as Hegel logically envisages are in fact empirically discovered (cf. GW 12.30–201.2). The problem with Kant was that, by declaring the modal categories to be purely subjective on

[88] *Critique of the Power of Judgement*, §76, AK V.401–404. It is also significant that in the 1812 Division of Being, with reference to "measure," Hegel says that this category can also be considered a "modality," for it does not constitute a determination of content but concerns rather its connection to thought, to a subject. This is indeed Kant's definition of a modal category, and Hegel here seems to endorse it (GW 12, 42.3–5). In the 1832 edition, in the same place, while repeating that "measure" can also be considered a "modality," he explicitly attributes to Kant the view that "modalities" are not content-determinations, with no indication that he personally endorses the view. GW 21, 67.11–17.

transcendental logical grounds alone, he had simply pre-judged the issue of discovery.

We have said that commentators have normally regarded these 1832 additions as out of place. In fact, the additions are witness to the extra lucidity that Hegel had gained regarding his own Logic by the time he set out to revise it. He was still pursuing the double agenda, developed in the Jena years at least starting from 1805/06, of according to nature a depth that it does not have in transcendental idealism, while at the same time maintaining the idealistic thesis that it is only in the medium of the concept that nature, indeed reality as a whole, attains (not just manifests) its intelligibility. The presence in experience of "facticity" now reinterpreted as the "immediacy of becoming," its generation and containment, is the issue that underlies the Logic from beginning to end. As we move from "being" to "essence" and then to "the concept," we move (as we can reflectively say at the end of the process) from "immediacy" conceived, respectively, as "contingency," "necessity," and "freedom."

(4) The categories of "essence" explicitly state and develop what is already said, but only *de facto*, by "measure." They define "being" as internally differentiated – on the one hand, as containing a principle by virtue of which it is intelligible *as* what it is; on the other hand, as equally containing a number of determinations that are peripheral to it but that acquire a status as determinations only by being referred to what defines the object as such in the first instance. This is quite generally the distinction between the "essential" and the "unessential." It is a differentiation *internal* to the subject matter of discourse because the "essential" proves to be such only to the extent that it manifests itself to be what the "unessential" would otherwise seem to be on its own account. And the "unessential," for its part, is such only to the extent that it demonstrates itself to be a nothing in itself – that its true being is the "essential." Each thus refers to the other, and the resulting double reference constitutes the internal structure of the subject matter in question. The development of the latter in the logic of "essence" is the process by which this reference, whether it proceeds in one direction or the other, reverses itself, in both instances exhibiting in ever more complex yet apparent forms the "being oneself in the other" which is the basic reflective schema of "becoming."

The categories of "essence" are those of classical metaphysics: ground, existence, appearance, force, actuality, absolute, relation – just to mention the ones that make up the main headings. The discourse which they govern is neither the disconnected one of "quality" nor the one of "measure," which is already expressly rule-governed but is still lacking in expressly reflective

containment. It is a discourse about large things, so to speak, those that we take for granted in ordinary experience and which are at the basis of classical metaphysics. Yet its intelligibility is still subject to external constraint, for the reciprocal reference of contrasting terms which its categories express is still dependent on the immediate assumption of precisely these terms. The presence of the thing they define, whether assumed starting from one term or the other, is therefore affected by an element of opaqueness – an immediacy still understood in the sense of contingency, for it requires for each term an explanation by reference to the other, and consequently a necessitation external to it. The realm of "essence" is one of necessitation. Progress in the actualization of the intelligibility (the *Objektivierung*) of the subject matter (the *Gegenstand*) proceeds *pari passu* with the elimination of precisely this immediacy of the presupposed terms. In effect, this means their absorption into the very referential process that defines the structure of essential being, to the point that the latter would have to be conceived, if still operating within the framework of the categories of "essence," in the manner of Spinoza's *causa sui*, as a pure self-reference generating its own content.

How Hegel retrieves, while at the same time transcending, the metaphysics of Spinoza at this final stage of the logic of "essence" constitutes a complex and delicate transition, upon which much depends for the interpretation of Hegel. Three considerations are relevant here. The first is that, although "contradiction" is a pervasive theme in the Logic, it is only in the course of the dialectic of the categories of "essence" that the risk of *formally* (not just *de facto*) incurring it repeatedly arises. This is because of the structure of the subject matter under consideration. "Essential being" would explicitly be both at once: made up of materially independent terms, *and* a whole in which each term is itself formally the whole. It is this pull in opposite directions that causes contradiction repeatedly to irrupt, according as the subject matter is successively defined on the basis of presumed originating terms. The truth of the categories of "being" was the distinction between "principle of determination" and "determination" itself, and this truth was finally made explicit in "essence." The truth of the categories of "essence" is now the overcoming of precisely this distinction. "Essence" must be shown to exist only *in* its determinations. "Essence" *is* the movement of these determinations, and this movement is propelled forward precisely by the occurrence of contradiction as caused by the assumption of determinations independent of it.

This result, however, should not be construed as betraying a deficiency on the part of the categories *as categories*. This is the second consideration. To

make the point in a phenomenological mode, the deficiency is rather on the part of the things of experience for which the categories of "essence" define the logic of discourse. These are things of nature. Hence, although Hegel refuses to reduce them to mere phenomena, they still lack the interiority, the full self-reflectivity, that would make each a world unto itself and which would satisfy reason's quest for intelligibility. Such an interiority, according to Hegel's idealistic thesis, is to be found only in the products of reason itself, that is, in the social entities, the works of art and religion, for which spirit is responsible. But the special merit of the categories of "essence" is that their dialectic reproduces in the schematic form proper to a work in logic what Hegel calls "the arduous labour of the understanding,"[89] that is to say, the labor that the concept performs in actual experience by permeating its whole content discursively. What the concept does is to introduce within the latter, in the representational medium most suited to its current purposes, ever new distinctions and ever new principles of explanation, all for the sake of collecting into a single coherent world free of internal contradiction the many things that otherwise fall scattered in experience. This is stating the case, of course, in a manner more suited to the *Phenomenology*. But the fact is that the categories of "essence" define the logic of the sciences of precisely this experiential process.

The further fact is that a complete world of nature cannot be had on natural terms alone. And were we to try to have it so – metaphysically, that is, quite apart from the scientific theoretical constructs that one can always introduce for explanatory purposes but which remain external to the things themselves and are always reformable – were we to try it, we would run up against the figure of Spinoza, the philosopher who famously construed a monistic ontology based on the self-identity of "substance" alone, itself a category of "essence." The price for this attempt is to reduce all the things of nature to mere surface-like events, the truth of which would consist (just as in Fichte's system) in their disappearing, in their nothingness – precisely what Hegel refused to do by insisting on the objectivity of the modal categories. This is the third consideration. Hegel resists any Spinoza-like reduction of the modes of substance to nothingness, and thus succeeds in retaining even in the possible things of nature the internal distinction already adumbrated by "measure," precisely by transcending the whole realm of "essence" and revealing as its truth, as subtending it and containing it all along, a yet more reflective level of discourse. This is

[89] E.g. GW 9, 27.18–19. See also the discussion of the work of the understanding in the Addition to §80 of the Encyclopedia.

the discourse, specific to the life of spirit, that has the concept itself and its products as its subject matter. Its logic is that of subjectivity. Only in its medium is the quest for complete intelligibility that motivates the dialectic of "essence" (the identification of *Objektivität* and *Gegenständlichkeit*) satisfied. But it must be clear that, just as "essence" reflectively made good the differentiation implicit in "measure" by reinterpreting it as a differentiation of concrete "things" (the "large things" of experience), so the logic of the "concept as concept" completes the work of sorting out these things which is the proper function of the categories of "essence" by reinterpreting them as the means for generating the things of the spirit. We are moving from the logic of a discourse about products of nature to that of a discourse about the products of spirit.

One can understand, therefore, Hegel's ambiguity with respect to Spinoza. It is an ambiguity that he shared with Jacobi. Like Jacobi, he saw in Spinoza the metaphysician who had brought to a logical conclusion the project of classical metaphysics of founding all things in the Absolute. He had done it without compromises or prevarications, and for this lucidity of intent he deserved respect. But, in keeping with the pre-Kantian assumptions of that same metaphysics, Spinoza had defined the Absolute in categories which are suited to finite objects only. Therefore, he had achieved the sought for completeness of explanation at the price of absolute abstraction. This is the point that Hegel was making in the second of his additions to the 1832 edition in connection with measure. By reducing the modal categories to merely subjective expressions, Spinoza had in fact emptied things of their inner measure, even of such as can be had quantitatively. He had pre-empted the possibility of their ever being assumed within the works of spirit, that is to say, of being made the subject matter of judgment. "The Spinozistic mode, just like the Indian principle of alteration, is the measureless,"[90] as Hegel then put it. But already in 1813, in connection with "actuality," Hegel had made it clear, echoing Jacobi, that Spinoza's Absolute is the abyss, *der Abgrund*, in which all determinations are made to disappear.[91] Their truth is their nothingness. "*Determinatio negatio est*," was Spinoza's motto. And for Hegel (though not necessarily for Jacobi), there was a truth in this. The truth of the "modes" of substance is the absoluteness of substance. But what Hegel found lacking in Spinoza's system was the contrary positive manifestation of the power of the Absolute in the appearance of the "modes," the positive presence of spirit in them.

[90] GW 21, 325.27–28.
[91] Cf. GW 11, 372.28–37. Spinoza is not named, but the criticism is obviously directed at him.

For that, according to Hegel, the extra dimension of subjectivity had to be added to that of objective substantiality. This was a need, of course, that Fichte and the pre-Romantics had already recognized long before the composition of Hegel's Logic. But, so far as Hegel was concerned, the move to subjectivity was not a matter of adding a thinking head, so to speak, to Spinoza's monistic substance. That would have been indeed making a mockery of Spinoza's otherwise perfectly self-consistent system. Nor was it a matter of escaping conceptualization, taking refuge either in the darkness of Romantic intuition or in Spinoza's perfect brightness of vision – in either case, letting all distinctions go lost. Hegel never leaves discursiveness behind. On the contrary, the transition to subjectivity is one of recovering conceptually precisely the source of discursiveness, the concept as concept.

(5) With the categories of the "concept" one can say indeed that we have stepped into the mind of God before the creation of the world[92] – though by "world" we must now understand nothing physical but a universe of meaning instead, and by "creation" the constitution of the conceptual medium that will make any reality, such as already exists or might exist, re-exist as intelligible. But of this universe it can also be said that it is a "realm of shadows," for it is made up of reflective abstractions only. Hegel speaks of the "impotence of subjective reason"[93] just as he speaks of the "impotence of nature" (*die Ohnmacht der Natur*).[94] Reason manifests its power only in the effect that it has by investing nature with a new meaning, and for that it needs the work of the finite concept that provides for it the required *de facto* material. In a way, Hegel's point is still a Kantian one. It is only ideally that full intelligibility is attained, the kind of intelligibility, to put it in more phenomenological terms, that would satisfy reason. But Kant was still beholden to the "thing-in-itself," to the metaphysics of "essence." Kant still believed that, if we just had intellectual intuition, the vision of a Spinoza, or a Leibniz, would be vindicated. Therefore he had declared the products of ideal conceptualization to be merely subjective – "subjective" in the pejorative sense of lacking objective truth – and their content ultimately self-contradictory. For Hegel, on the contrary, it is only when the concept has itself as its object that a perfect determination is achieved by virtue of which the particular and the singular, *as* particular and singular, and *as* distinct from the universal, coincide nonetheless with the universal and with each other, so that, regardless of where one starts, one already has in principle the whole object. The immediacy of the starting point, which was irreducible in the categories of "essence," is totally relativized by

[92] Cf. GW 21, 34.9–11. [93] GW 12, 42.19. [94] GW 19, 187.11, §250.

is an issue to which we shall briefly return later. The point now is that, once Hegel has worked out through the classical theory of predication and syllogism all the mutations and permutations that are possible in the reciprocal relation of these three first determinations of the concept, what we have is a fully determined concept of the concept, a self-standing and self-justifying discourse – therefore, also a first realization of objectivity understood as self-contained intelligibility (*Objekt*). This realization, and nothing else, constitutes the transition from subjectivity to objectivity.

The distinction between "subjective" and "objective" is for Hegel first and foremost a logical one, a distinction between types of discourse. It is not dependent, as it is for both Kant and Fichte, on any psychological or even phenomenological model of the mind – a model which would depend for Hegel, on the contrary, on the logical distinction. Hegel's distinction is more in line with, but not quite the same as, that of Descartes between "clear and distinct" and "unclear and indistinct" – not quite the same because the categories of the Logic, and the discourse associated with each, are all clear and distinct on their own respective terms. The distinction, to repeat a point already stressed, is rather between the "abstract" and the "concrete," between the less and the more developed form of objectivity. Another puzzling feature of the Logic is therefore also dispelled. It might seem strange indeed that in a formal logic, under the heading of "objectivity," Hegel would consider such earthly sounding categories as "mechanism," "chemism," and "teleology," as he does in the second section of Book Three. To be sure, these are concepts obviously derived from, and referring to, the Philosophy of Nature.[96] But, inasmuch as they enter into the Logic, what they signify are forms of objectivity – more precisely, such types and degrees of intelligibility as we might expect in different experiential contexts.[97] In this segment, the Logic reflects upon the kind of self-sustaining objectivity that the categories of "being" and "essence" were in fact able to deliver within the artificial context of its ideal reconstruction

[96] Erdmann rightly points out that these concepts are treated in the Logic precisely as logical categories, and that "mechanism" therefore defines a sphere of objectivity that exceeds the subject matter of the physical sciences alone. "Mechanism" can apply, for instance, to the things of the spirit as well. "Since mechanism is a logical category, one correctly speaks of it even in the sphere of the mind. There is mechanical memory; there are mechanical arrangements in the State, just as much as, where various sensible objects form an aggregate, there are mechanical combinations of them." Johann Eduard Erdmann, *Outlines of Logic and Metaphysics*, trans. B. C. Burt (London: Swan Sonnenschein, 1896), p. 210, §192, note 2.

[97] For a discussion of how Hegel progressively came to realize that the categories of quantity as developed in a philosophy of mathematics are not sufficient for a comprehension of nature, that the latter requires more concrete categories than are developed in this part of the Logic, see Cinzia Ferrini, *Dai primi hegeliani a Hegel* (Napoli: Città del Sole), pp. 227ff.

of discourse in general. It judges the extent to which that objectivity is indeed self-sustaining or requires instead the support of discourse itself, as itself the source of intelligibility and as now explicitly considered (in this final part of the Logic) in precisely this role.

The Logic concludes, therefore, with a final segment on the "idea." Here we find the categories of freedom that are at work in the Philosophy of Spirit. They are the categories of a discourse that explicitly has itself as object – knows itself to be the source of the norm of what constitutes the true and the good. Most of all – to make this point in a phenomenological mode first – it recognizes its pre-conceptual or natural past. It recognizes it, however, as already implicated in the realm of the conceptual in the form of immediacy, as that which needs explaining. Hegel's move in this respect is the same as Fichte's, but with the essential difference to which we have already adverted. Fichte's Science begins with an abstractive act that would have its self-expression as its only product but finds itself generating instead an "other" which, on its original intention, has to appear to it as but a scandal. The truth, in a Fichtean context, lies necessary in an unattainable beyond. For Hegel, the conceptual reflection which is at the source of the Logic also dissolves, as for Fichte, any otherwise merely presupposed natural ties in order to re-establish them on its own terms in a universe of meaning. But such ties come to (*werden zu*) their truth in this universe positively, in the forms of human institutions in which, *and in which alone*, the concept finds its satisfaction. And their being turned into contingent facts is the first step in their attaining this truth. In a Hegelian context, therefore, the point just made phenomenologically, namely that discourse recognizes its pre-conceptual past, is open to strict conceptual formulation, with no residue of mythical imagery. What is recognized at the end of this long reflective discourse which is the Logic is that reflection is responsible for the immediacy which is first expressed in the category of "being" and is then methodically contained in various forms of "becoming," all of them culminating in that perfect "coming to be oneself" which is the concept of the concept. At the end, the Logic rejoins its beginning. We are ready, therefore, for the transition (which is in fact no transition because it never leaves thought behind) by which we begin the existentially more concrete work of retrieving the immediacy of nature bit by bit, first of all by simply discovering it.[98]

[98] I say "discovering" rather than "observing" in order to avoid the empiricist connotations of this last term. Had not the empirical sciences made the word their own by associating it with their artificial methodology, "observing" would be perfectly acceptable. One must begin by simply looking at nature, though *intelligently*.

Therefore "method" is the category which brings the Logic to an end. Kant's *Critique of Pure Reason* also concluded with a chapter on the methodology of pure reason. But, in that context, method is an order which reason seeks indeed to discover in experience out of a need which is typically its own, but which remains nonetheless external to the content of experience. It is a subjective product, where "subjective" is understood in a privative sense. For Hegel, on the contrary, "method" is the rhythm (*Lebenspuls*) of experience itself. It is an ordering which is internal to it and the consequence of the fact that experience is an idealizing process from beginning to end. As a work of conceptual art, the Logic stands of course at the end of that process. The "logical order" (*das Logische*) that it makes explicit, however, stands with respect to the same process as its *a priori*. It is in this sense, again, that the Logic stands in Hegel's system as both the final and first part.

ISSUES OF INTERPRETATION

The Logic *does* make an ontological commitment, namely that being is in becoming. But it makes it transcendentally, one might say, by demonstrating that, unless so conceived – unless "being" holds an internal difference by virtue of which a discursive account of what it is can be construed – it could not be the object of intelligent apprehension. The categories are the forms of precisely this discourse in the medium of which "being" is made intelligible and the process of discovering what it is in actual fact can begin. But this discovery is realized only in the sciences of nature and spirit. In other words, to the extent that Hegel's Logic is identical with metaphysics, it is so only in a sense which is definitely post-Kantian. The meaning of "metaphysics" is modified by being identical with "logic" just as much as the meaning of the latter is modified by being identical with the former.[99] There is no question of the categories of thought being *tout court* "the most general and fundamental forms of being."[100] One can also say

[99] GW 20, 67, §24.

[100] S. Houlgate, "Logic and Nature in Hegel's Philosophy: A Response to John Burbidge," *Owl of Minerva*, 34.1 (2002–2003), 107–125, p. 109; also, *The Opening of Hegel's* Logic, p. 436. Houlgate's position is developed explicitly in opposition to that of Robert Pippin, according to whom the project of Hegel's Logic is the transcendental one of determining "the conditions under which any subject must think in order to think objectively at all." For Pippin, see *Hegel's Idealism: The Satisfaction of Self-Consciousness* (Cambridge: Cambridge University Press, 1989), p. 246. I have also interpreted Hegel's Logic in a transcendental spirit. But one must remember that, for one thing, Hegel presents the Logic as itself a form of life, the perfect instance of self-becoming in which nature finds intelligent completion; and, for another, that there is no question of *applying* the categories to a material external to them, as is the case for Kant's categories. Just as a grammar

that the Logic is a renewed ontological argument, but again, only in a sense consistent with Kant's critique of that otherwise traditional argument. The Logic only demonstrates that the perfect conceptual determination of an object is achieved when the subject matter is the concept itself – that only by virtue of the self-contained, reflective movement of conceptualization (which is itself the perfect instance of "becoming" and thus precludes any Kantian opposition between "thought" and "being") is the mental space generated within which "being" is manifested, or becomes reconstituted *for us* as what it happens to be in itself. The move in discourse is necessarily from concept to existence. The Logic also has phenomenological implications, for it follows that, whatever the pre-conscious or purely physiological pre-history of experience, once the latter comes on the scene, it comes fully dressed, so to speak – already rich in distinctions and commitments. Even as simple a gesture as the pointing at this or that, provided the gesture is intelligent at all, already contains a judgment. We may call it a judgment of the senses, to use the language of scholastic psychology. But the point is that such a judgment is the precursor of the abstract, artful judgment which is performed in the Logic. For Hegel, we are logicians from the beginning.

This is not, however, the only way in which Hegel's Logic has been read or is still read, and to ferret out all the various strands of this interpretation is a complicated affair indeed. For one thing, the Logic has been from early on an easy object of ridicule. The judgment of Trendelenburg, an author whom Kierkegaard had occasion to quote,[101] is typical in this respect. As he says, "it does not make much difference that [Hegel's dialectic, unlike Fichte's *Wissenschaftslehre*] begins with the concept of Being, for this concept is the empty image of Being. If it nevertheless comes to the concept of reality and to concrete forms, we do not perceive whence it gets to them. For pure thought will not accept them, and then permeates them, but endeavours to make them. Thought, expressed in this way, is born blind and centers no eyes towards the outside."[102] Yet, despite ridicule, the Logic has undeniably exercised a mighty influence, in all lands and in the most disparate of fields. In the political arena, it has been repeatedly "reformed" to serve the cause of both left- and right-wing movements, and

distills in a medium typically its own the structure of a language, so too the Logic distills in the medium of pure reflection the rationality of any and every discourse.

[101] Søren Kierkegaard, *Concluding Unscientific Postscript*, Vol. I, ed. trans. H. V. Hong and E. H. Hong (Princeton, NJ: Princeton University Press, 1992), pp. 110–111.

[102] F. A. Trendelenburg, *Logische Untersuchungen*, 2 vols. (Leipzig: Hirzel, 1862), Vol. I, p. 92 (my translation).

of liberalism as well.[103] In America, it was spread by the St. Louis Hegelians. It eventually found a lively expression in the pragmatism of Charles S. Peirce and, in more recent times, of Wilfrid Sellars. Interpreted in the spirit of this pragmatism, Hegel's Logic is still very much alive today.[104] However, typical of these movements and traditions (the St. Louis Hegelians perhaps excepted) is that they were Hegel-inspired, yet independent philosophical positions rather than schools of textual exegesis. And there is, so far as the Logic itself is concerned, also a long-standing tradition of textual exegesis. It can be traced at least as far back as Johann Eduard Erdmann's commentary on the Logic,[105] and, in English, to J. Hutchison Stirling's exciting *The Secret of Hegel*.[106] It is a variegated tradition, not seldom motivated by religious interests. In the case of Stirling, the religious inspiration of Hegel is beyond doubt. We read: "Kant and Hegel . . . have no object but to restore Faith – Faith in God – Faith in the immortality of the Soul and the Freedom of the Will – nay, Faith in Christianity as the Revealed Religion – and that, too, in perfect harmony with the Right of Private Judgement, and the Rights, or Lights, or Mights of Intelligence in general" (xxii). This religious motivation raises of course the issue of whether Hegel's Logic ought to be interpreted as buttressing Christian faith or, on the contrary, as demythologizing it. It also raises the broader issue of hermeneutic strategy – whether one should take the Logic as the norm for interpreting other parts of Hegel's system or, on the contrary, read some of the religious imagery that Hegel uses elsewhere back into the Logic.

But if we abstract from these broader considerations and concentrate instead on the more logical/metaphysical issues that the Logic raises, two lines of interpretation can be identified that roughly correspond to its two aspects, namely, on the one hand, the interpretation that the Logic makes an ontological commitment and to that extent advances a dogma, and, on the other hand, the interpretation that the Logic still operates within the general framework of Kant's and Fichte's idealism and to that extent

[103] Karl Marx famously used Hegel's Logic for his leftist political agenda, Benedetto Croce used it in his defense of Italian political liberalism, and Giovanni Gentile drew upon it in defense of Italian fascism.

[104] Robert Brandom is at the moment perhaps the best-known example of one who still reads Hegel pragmatically in the spirit of Wilfrid Sellars. Although he relies mostly on the *Phenomenology of Spirit*, he methodically reads the text in accordance with the linguistic turn. See, for instance, Robert Brandom, *Tales of the Mighty Dead* (Cambridge, MA: Harvard University Press, 2002), pp. 31–32, 44–57; "The Structure of Desire and Recognition: Self-Consciousness and Self-Constitution," *Von der Logik zur Sprache, Stuttgarter Hegel-Kongress 2005*, ed. R. Bubner and G. Hindrichs (Stuttgart: Klett-Cotta, 2007), 426–449.

[105] J. E. Erdmann, *Grundriß der Logik und Metaphysik* (Halle: Schmid, 1864, 4th edn).

[106] J. Hutchison Stirling, *The Secret of Hegel* (Edinburgh and New York, 1865; 2nd revised edn, 1898).

never abandons the realm of discursive thought. John M. E. McTaggart – personally an atheist and by no means an orthodox Hegelian – may be taken as a reliable representative of the first line of interpretation. It is the ambiguity of his position, itself characteristic of that tradition, that makes his studies on the Logic particularly interesting. McTaggart leaves no doubt that this work of Hegel must be read as a work *in logic*. That is to say, the Logic deals from beginning to end with categories and their dialectical development. The Idea with which it culminates is exclusively the product of reason. But McTaggart then balks at Hegel's claim that "method" is the exclusive content of the Idea of the Idea but insists that it has a content of its own over and above the categories that have led up to it.[107] What this content might be is not clear, but I presume that it would have to be an abstract schema of the harmony that obtains in the real universe between individual and individual, and between individual and universe. Accordingly, McTaggart has no problem advancing a Hegel-inspired cosmology, where by "cosmology" he means "the application, to subject-matter empirically known, of *a priori* conclusions derived from the investigation of the nature of pure thought."[108] This is not to say that McTaggart believes that it is possible or that Hegel himself ever tried to derive particular laws of nature *a priori*. But he does apparently believe that the categories have an *explanatory* role to play even in the empirical sciences, or that in the Idea we already have, but *sub specie æternitatis*, that which, *sub specie temporis*, is the goal towards which all reality is moving. "But such an idea is, *sub specie æternitatis*, far too implicit, and, *sub specie temporis*, far too distant, to allow us to use it in deciding on any definite course of action in the present."[109] In principle, however, the two opposites ought to be joined. Or again, although McTaggart obviously does not believe that it would be possible *in fact*, or even desirable, to deduce the pen of Herr Krug from the Idea, he has difficulties accepting the category of "contingency" as truly objective, and he does leave open the possibility of that deduction at least in principle. As he says in connection with "contingency",

> the nature of each individual is to be taken as determined by his place in a whole, which we must conceive on the analogy of an organism – a unity manifesting itself in multiplicity. The individual has his entire nature in the manifestation of this

[107] Cf. J. M. E. McTaggart, *A Commentary on Hegel's Logic* (Cambridge: Cambridge University Press, 1931), pp. 305ff.

[108] J. M. E. McTaggart, *Studies in Hegelian Cosmology* (Cambridge: Cambridge University Press, 1918), p. 1.

[109] J. M. E. McTaggart, *Studies in the Hegelian Dialectic*, 2nd edn (New York: Russell & Russell, 1910), p. 232.

whole, as the whole, in turn, is nothing else but its manifestation in individuals. Through this unity the parts will mutually determine one another, so that from any one all the rest could, with sufficient insight, be deduced, and so that no change could be made in any without affecting all.[110]

And McTaggart is also puzzled by the notion of an "*Ohnmacht der Natur*," apparently unaware that for Hegel, just as it was also the case for Fichte, nature or the things of experience acquire *for us* the character of irreducible contingency as measured against the norms of an intelligibility that reason alone brings to them.[111] It is reason that makes nature contingent. It transpires, in other words, that despite all protestations that the Logic must be read *as logic*, McTaggart has in fact invested it from the beginning with pre-Kantian Spinozist overtones. While taking the Logic to lay out the blueprint of a universe of meaning that makes the discovery of an actual cosmos possible, he assumes that it thereby also lays out the blueprint of that cosmos. It is from the start an exercise in cosmogony. This is the source of the ambiguity that pervades his position throughout, as well as the tradition that he represents.

This reading of Hegel is in some quarters still accepted today.[112] The slide back into Spinoza's metaphysics of substance is avowedly avoided because

[110] McTaggart, *Studies in the Hegelian Dialectic*, p. 209. For McTaggart's claim that Hegel's philosophy does not try to trace the rationality of the universe in all its details, see pp. 204–205. Wilhelm Traugott Krug (1770–1842) is notorious for the challenge that he issued to the "new idealism" of Fichte and Schelling to "deduce his pen" from their first principles. Hegel must have found the challenge particularly irritating, for he waxed ironic against it in one of his earliest published essay and repeatedly returns to it. According to Hegel's mature position, the notion that it is possible to determine anything in nature absolutely makes no sense, for the simple reason that things of nature do not perfectly control their own becoming and are therefore susceptible to a potentially infinite number of external influences. Perfect determination is possible only in the ideal realm of the concept. So far as nature is concerned, determination will always be relative and reformable, according to limits which are to be determined by the physical sciences. This, I take it, is what Hegel means by the *Ohnmacht der Natur*, "the impotence of nature," in §250 of the *Encyclopedia* where he again waxes ironically against Herr Krug. For Hegel's essay, "Wie der gemeine Menschenverstand die Philosophie nehme – dargestellet an den Werken des Herrn Krug," *Kritisches Journal der Philosophie*, 1.1 (1802), see GW 4.174ff. English trans. "How the Ordinary Human Understanding Takes Philosophy (as displayed in the works of Mr. Krug)," in di Giovanni and Harris, *Between Kant and Hegel*, pp. 292ff.

[111] McTaggart's interpretation is the exact opposite. "The cause of the imperfection [of things] is nothing but the fact that we do not see everything at once. Seen as we see things now, reality must be imperfect. But if we can attain to the point of looking at the whole universe *sub specie æternitatis*, we shall see just the same subject-matter as in time; but it will appear perfect, because seen as a single concrete whole, and not as a succession of separated abstractions." *Studies in the Hegelian Dialectic*, p. 175.

[112] It is in effect that of Charles Taylor in *Hegel* (Cambridge: Cambridge University Press, 1975), cf. pp. 97–98; and more recently of Frederick Beiser in *Hegel* (New York: Routledge, 2005), cf. pp. 71ff.

of the principle of subjectivity that Hegel had added to his predecessor's view of the universe. But it is precisely on this issue, namely whether a principle of subjectivity can be added to Spinoza's pantheism, that a host of difficulties arise. On the one hand, there is the question of how radical Hegel's break was from Schelling and his Romantic Spinozism in the Jena years, and how serious was "*Fichtes Verdienst*" – the debt he owed to Fichte. The more radical the break, and the more serious the debt that Hegel owed, the more his Logic ought to be read as issuing, not indeed in any metaphysical theory, but, as Fichte's *Wissenschaftslehre* does, ultimately in social theory – or more accurately, into what the Germans call the *Geisteswissenschaften*, the disciplines that have the historical works of spirit for their subject matter. On the other hand, if one insists on maintaining a strong continuity between Hegel's Logic and Schelling's Identity Philosophy, then the question is how seriously one should take Hegel's comments regarding modality added in the 1832 edition of the Logic. The point is that one cannot add a subjective dimension to Spinoza's "substance" without turning it into a mind, that is to say, either into what would no longer be "substance" but only a mode of it on Spinoza's own principles or, on Hegel's, into an individual that needs a community of other individuals in order himself to be one. In either case, we do not have anything that would amount to McTaggart's Absolute Idea from which, allegedly, every minute detail of reality can in principle be deduced. This is a position that Hegel unequivocally rejected and even found infuriating. The alternative is to consider the same Idea as another version of the scholastic *ens realissimum* – but, as Kant well knew, that idea is inherently contradictory unless taken as an empty abstraction where all determinations, rather than being grounded, are in fact made to disappear. The strength of Spinoza's position lies precisely in the fact that it bypasses the need to derive anything from "substance" directly. The latter contains all its attributes, as well as both its infinite and finite modes, in the way in which a differential equation contains within it a definite infinity of differing terms. When it is a matter of calculating the value of any single term, one must start arbitrarily by assuming some other given term – the choice of the latter being dependent on factors which, so far as the equation is concerned, are purely "subjective" in a privative sense of the word. In Spinoza's language, that means assuming a finite standpoint, the presence of which in the system remains an irreducible surd. As for Hegel, the strength of his Logic lies in the fact that it finds a ground for this contingency in the indeterminacy necessarily inherent in the structure of things which are in becoming. And this is an indeterminacy which is either contained by such theoretical

constructs or such cosmogonic theories as the sciences provide or, as one might say in the spirit of Hegel, is redeemed by the works of spirit.

The second line of interpretation is more recent and more diffused, and also never unequivocally presented as an actual reading of Hegel's Logic or as a position inspired by it. In brief, the claim is that "the truth is worked out by telling a story. It is not just that the story attempts to tell the truth that is already there. Rather, in telling the story, we partly create the truth we are attempting to articulate."[113] Any non-story residue in a story for which the "partly" in the quote makes allowance would have to be absorbed into some other story. And indeed, for Hegel we cannot ever step outside the boundaries of discourse. But what is missing in this hermeneutic reading of Hegel is the Schellingian moment which, however much Hegel might have learned from Fichte, is never lost in his Logic; missing is the fact that it is nature which in the abstract medium of logical discourse attains the self-comprehension, and the efficacy, which we attribute to spirit. Nature is for Hegel, just as it was for Schelling, the "pre-self" of the "self," not just the "other-than-self" of Fichte. It is true that human birth is never simply a biological event but always a birth into a community. Genes and chromosomes work their magic only as personally named within a system of family relations. And neither is human death simply a biological event but is always either peaceful or violent, surprising or expected, cowardly or heroic, or what have you. But it is the irrevocability, the utter finality, of both birth and death as biological events that makes for the seriousness of the experiences mediated by language built around them. As Hegel makes clear in the *Phenomenology of Spirit* in connection with the battle of prestige which is his dramatic account of the origin of human history, that battle would not be serious, nor would the prestige or the claims to rightful possession which are at stake in it be more than empty words, if the battle were not a life-and-death struggle.[114] In other words, it is only from the detached standpoint of a badly abstractive reflection that the distinction between story-telling and history gets blurred. To the one caught up existentially in the event that the story-teller might romance about, the difference between story and history is undoubted. It is precisely

[113] I am borrowing this description from Christopher J. Insole's sympathetic but also sharply critical review of Charles Taylor's book, *A Secular Age* (Cambridge, MA: Harvard University Press, 2007), "Informed Tolerance," *The Times Literary Supplement*, 5470 (February 1, 2008), 5. It is not clear how far Charles Taylor personally espouses this position. But to the extent that he does and in thus espousing it ascribes it also to Hegel, then if one takes into consideration his 1975 book (see note 112), he would stand on both sides of the dogmatic/hermeneutic spectrum in the interpretation of Hegel.

[114] GW 9, 111.25–112.2.

the function of logical discourse to produce clarity about it, the very clarity which has traditionally gone under the name of wisdom.

Nature is important. I have remarked more than once that its presence is never far from Hegel's mind. Nor is it far from the Logic. But precisely this presence poses problems for his System in general, and for the Philosophy of Spirit in particular, on any reading of the Logic. There is, in the first place, the issue of the relation of the Logic to the Philosophy of Nature. One can understand how that Logic should provide the basis for a reflection upon, and often destructive critique of, current mathematical and scientific theories. This has always been one task of philosophy. Hegel performs it admirably in his many Remarks, especially those added in 1832. But there is more. Granted that the Logic brings to explicit, formal expression the logicality of experience, one should expect that this reflective work would be continued in what we may call a phenomenology of the body – above all of the human body – showing how the body generates indeed by virtue of its attitudes and activities an organic space typically its own, and how a hierarchy of such spaces might together constitute a world of experience. One should expect, in the words of a recent commentator,[115] a "system of natural kinds," each exhibiting an internal and more or less complex structure of its own, and all of them the physical analogs (but not the applications, as they would be in Kant) of the logical schemas that Hegel has developed in the Logic. One might even take this phenomenology of nature as the more reflective expression of the natural attitudes that we instinctively assume towards nature in lived experience and which, existentially but not systematically, in fact underpin the work of the empirical sciences and make them possible. These are scenarios all perfectly consistent with Hegel's idea of the Logic on this post-Kantian reading. But is this all that Hegel is doing in his Philosophy of Nature? Is he not rather trying to establish, as if *a priori*, the originating categories of nature that would systematically provide the basis of all physical science? And would not such an attempt, although perhaps still conceivable in Hegel's times granted the state of the physical sciences in his day, still be of any value for the modern sciences? Most of all, is it consistent with Hegel's idea of the Logic?

Then there is the issue of the relation of the Logic to the Philosophy of Spirit. The latter, and especially the *Phenomenology of Spirit*, is the part of Hegel's legacy which is still very much alive today. Hegel's apparent attitude towards history, however, harbours a serious ambiguity. There is

[115] Brigitte Falkenburg, "How to Save the Phenomena," in *Hegel and the Philosophy of Nature*, ed. Stephen Houlgate (Albany, NY: State University of New York Press, 1998), p. 129.

no doubt teleology in history, at least in the sense that historical events are the product of rational (or irrational) decisions, and such decisions have a logic of their own which may or may not work to the natural and spiritual advantage of the agents responsible for them and their inheritors. Barring natural accidents or changes of heart, they bring in train consequences which are like a self-fulfilling prophecy. In this sense reason realizes itself. A humanity that decides to arm itself with nuclear weapons should not be surprised (it would be only rational!) if it finds itself immolating itself for the sake of self-defense. Historians and philosophers would do well to detect such rational (irrational) intentions working themselves out in history. In the *Phenomenology of Spirit* Hegel himself gave splendid analyses of cultures being born and dying on the basis of specific attitudes assumed with respect to nature. But this does not mean that there is a single end guiding the whole of history underhandedly, so to speak – as if, seen in the context of the broader picture, everything would appear to be exactly as it ought to be. This was the view of the Enlightenment. Kant himself still held on to it in his critically modified fashion. It is obviously a secularized form of the Christian belief in the Parousia and there is evidence that it also governs, at least at the rhetorical level, Hegel's view of the development of spirit in history. But is this view consistent with the logic of his Logic? Would it not force us into a reading of the Logic quite like that proposed by McTaggart? This is an important issue, all the more important because it also implicates the other issue, already mentioned, of how much Hegel's thought is substantially dependent (not just historically) on Christian religious belief.

There is finally the issue that the Logic itself raises. It purports to be the product of pure reason – the most abstract conceptualization of the concept precisely as concept. But the fact is that, as Hegel himself indicates in his Remarks, it closely reflects the historical progress of classical Western metaphysics. It would seem that, although Hegel might have freed the Logic from the mythology of reason on which Fichte's *Wissenschaftslehre* depended – and Kant's critical system also, in its own way – he did not free it from its historical past. And it would have been peculiar indeed if he had, seeing that the Logic is the logic of a thought that has for its object "being in becoming" and is itself the instance of a perfectly self-contained process of precisely such a becoming. But then, how dependent is this Logic on what happens to be the lexical structure of the language of the metaphysics which it reflects historically? How dependent is it on Aristotle's logic of predication? While the Logic is admittedly still a work in progress, in what sense can it claim to be, in principle at least, the

absolutely accomplished science without appearing to be an instance of intellectual imperialism? One way perhaps of disarming this criticism is to say that the Logic is absolute science only in the sense that it is capable of recognizing itself (and thus containing its limitation even as logic) as an analog of rationality as such – a rationality of which there can be other analogs, all of them capable of communicating across cultures and across times precisely because they are the analogs of one rationality – but at a distance as it were, with something always being lost in translation. I would like to take the claim in this sense, but it is not at all clear that this was Hegel's intent.

These and many others are the issues raised by any reading of Hegel's Logic. What they have in common is that they are all uniformly philosophically significant issues. And this is sufficient motivation for a renewed study of this now classic *Wissenschaft der Logik*.

Translator's note

THE HISTORY OF TRANSLATION

Hegel's Logic has a long tradition of translation into English. In the *Secret of Hegel* (1898), Stirling included a translation of the section on "quality," as well as loose renditions of substantial excerpts from "quantity," notably Remark I on calculus.[1] On the American side, there already was the translation of a brief excerpt taken from the concluding chapter of the Subjective Logic (GW 12.236.3–20; 25.10–13) in the *Journal of Speculative Philosophy* (1869). It came as the Appendix to what appears to be a précis of the Encyclopedia Logic intended for a course of instruction.[2] We also know from the testimony of William T. Harris that the St. Louis Hegelian Henry C. Brockmeyer, to whom the same Harris dedicated his *Hegel's Logic*, had translated the whole Logic in 1859 and 1860. Apparently this translation was Harris's first exposure to Hegel. Harris had copied it out and, as he says, it "still exists, but has never been printed, any portion of it."[3] Back in Great Britain, a translation of the Subjective Logic was published in two volumes at Oxford by H. S. Macran, in 1912 and 1929.[4] And it was also

[1] *The Secret of Hegel* (Edinburgh and New York, 1865), pp. 218–321; 510ff.; 557ff.

[2] *Journal of Speculative Philosophy*, 33 (1869), 257–281; 34 (1869), 369–371.

[3] William T. Harris, *Hegel's Logic, a Book on the Genesis of the Categories of the Mind* (Chicago, 1890), pp. xi, xii. But Brockmeyer's translation must have been printed at least in parts, perhaps privately. The Harvard collection includes a volume that contains a translation of Hegel's "Doctrine of Essence," with no name of author or place and no date of publication (pp. iv–214). Inserted between the pages are notes written on the stationery of W. T. Harris. This is very likely a portion of Brockmeyer's translation. (I am grateful to my McGill colleague Andrew Reisner for having physically examined the book for me.) The editor of the Muirhead Library of Philosophy, which included the 1929 translation of the Logic (see note 5 below), relates in a prefatory note that he had been approached some years before "by the surviving friends of Henry Brockmeyer with a view to the publication in that series of the translation that he had left. It was to be accompanied with a short biography of the translator, and to partake of the character of a tribute to his memory both as philosopher and as Governor of the State of Missouri." This request was declined because the tribute seemed inappropriate to the aims of the series. (Vol. 1, pp. 17–18.)

[4] *Hegel's Doctrine of Formal Logic, Being a Translation of the First Section of the Subjective Logic*, trans. H. S. Macran (Oxford: Clarendon Press, 1912); *Hegel's Logic of World and Idea, Being a Translation*

in 1929 that a first complete translation finally became available, produced by W. H. Johnston and L. G. Struthers. It was published in both London and New York.[5] This text remained the standard English translation of the Logic until it was replaced in 1969 by that of Arthur V. Miller.[6] As for the Encyclopedia Logic, a translation was published at Oxford in 1873 by William Wallace. It was republished in revised form in 1892[7] and again, but with only minor variations and with an Introduction by J. N. Findlay, in 1975.[8] A completely new translation by T. F. Geraets, W. A. Suchting, and W. H. Harris was published in 1991.[9] Finally, Stephen Houlgate has included a portion of the German text of Book One of the Greater Logic (up to the end of Section 1, Chapter 2), together with an edited version of the Miller translation of the same text, in his 2006 commentary.[10]

In preparing the present text, I have of course consulted and profited from the results of all previous efforts. Throughout I have also used as control the excellent Italian translation of Arturo Moni, first published in 1924–1925 and revised in 1968 by Claudio Cesa.[11] The present translation is, however, completely new, and, since I have departed from standing conventions on several key terms, a few words of explanation are now in order.

ISSUES OF TRANSLATION

The Logic's range of vocabulary is extremely narrow, as one would expect of any logic. The few terms which are key to it present, however, considerable difficulty. In this translation, I have taken as my starting point the Glossary

of the Second and Third Parts of the Subjective Logic, trans. H. S. Macran (Oxford: Clarendon Press, 1929).

[5] *Hegel's Science of Logic*, trans. W. H. Johnston and L. G. Struthers, 2 vols. (London: Allen & Unwin; New York: Macmillan, 1929).

[6] *Hegel's Science of Logic*, trans. A. V. Miller (London: Allen & Unwin; New York: Humanities Press, 1969). A list of corrections which Miller circulated among friends and colleagues was never included in the subsequent reprints or in the paperback edition.

[7] *The Logic of Hegel, Translated from the Encyclopedia of the Philosophical Sciences*, by William Wallace (Oxford: Oxford University Press, 1873, 1892).

[8] *Hegel's Logic, Being Part One of the Encyclopedia of the Philosophical Sciences (1830)*, trans. William Wallace, with a Foreword by J. N. Findlay (Oxford: Clarendon Press, 1975).

[9] *G. W. Hegel: The Encyclopedia Logic*, trans. T. F. Geraets, W. A. Suchting, and H. S. Harris (Indianapolis/Cambridge, MA: Hackett, 1991). The Introduction (pp. xxxii–xlviii) includes a minority report by the late Suchting which takes issue with many of the majority decisions regarding the translation of key terms.

[10] S. Houlgate, *The Opening of Hegel's Logic: From Being to Infinity* (West Lafayette, IN: Purdue, 2006).

[11] *G. W. F. Hegel: Scienza della Logica*, Vols. I and II, trans. Arturo Moni (1924–1925), revised by Claudio Cesa (Roma-Bari: Laterza, 2001).

of the Geraets/Suchting/Harris translation of the Encyclopedia Logic, but I have taken to heart, and have often agreed with, the Suchting minority report.[12] I have steadfastly refused to resort to mechanical devices in cases where different words in German need to be kept distinct but are normally translated by the same word in English. Artificial constructs (unless they are in the original languages) are not translations but rather open admissions of failure in translation. Below is a list of terms that presented special difficulty, along with a brief explanation of my decisions on how to handle them.

an (in) sich, ***an (in) sich selbst***, ***an (in) ihm (ihr)***, ***an (in) ihm (ihr) selbst***, ***für sich***, ***für sich selbst***, ***für ihm (ihr) selbst***. These are simple expressions, but difficult to translate and all the more challenging because there are important conceptual distinctions riding on them, as I now must explain.

There are two syntactic distinctions at work in them. One is between pronouns in indirect objective form (*ihm*, *ihr*) and in subjective or reflective form (*sich*). The difference between *an (in) sich* and *an (in) ihm (ihr)*, and between *für sich selbst* and *für ihm (ihr) selbst*, is, therefore, syntactic in origin (*sich* refers to the subject of a sentence; *ihm (ihr)* to a third term). But Hegel uses the contrast between *an (in) sich* and *an (in) ihm (ihr)* also to convey a conceptual difference. A determination is present in a concept *an ihm* when it accrues to it because of its external context (cf. GW 21, 112.9–11: "In so far as that which something is *in itself* (*an sich*) is also *in it* (*an ihm*), the something is affected with being-for-other"; also, GW 21, 108.10–11). It may well be that the determination already *implicitly* belongs to the internal logic of the concept (that is, is present in the concept *an sich*), and that a logician would already be able to recognize it as thus belonging to it on the basis of its external usage and its genesis as concept. (Cf. 21, 219.13–31.) As yet, however, the determination is not *said* by the concept itself – that is to say, the concept has not as yet expressly appropriated it. It remains, therefore, still external to it. When the concept explicitly expresses the determination, then the latter is present in it *für ihm*, or, conversely, the concept possesses it *für sich*.

The other distinction is between *sich* understood as subjective/reflective pronoun and *selbst* ("self") understood demonstratively. It is in this demonstrative sense, that is, in order to reinforce the *sich* and the *ihm (ihr)* rhetorically, that Hegel uses the *selbst* in *an (in) sich selbst*, *an (in) ihm (ihr) selbst*, etc. To further complicate things, *selbst* can be used in German, just as it

[12] See note 9 above.

can in English, both in this just cited meaning of demonstrative pronoun or as a noun.

Now a problem of translation arises because English does not *verbally* distinguish between objective and subjective pronouns but, when necessary, adds "-self" to a pronoun in order to make it subjective/reflective. Nor does English verbally distinguish between this subjective/reflective form and the same form but used in demonstrative function. (Cf.: "He did it to himself"; "He did it himself.") The net result is that, if we were to translate the German expressions literally, we would come up with the awkward "in it itself," "in itself itself," "for it itself," "for itself itself," or with variations thereof. The problem is how to avoid this awkwardness and at the same time make sure that, in using "self," we do not surreptitiously introduce in English the word's meaning as noun whereas in German the corresponding *selbst* is purely demonstrative. The problem is especially acute in rendering the distinction between *an ihm selbst* and *an sich selbst*.

I concede that there is no single way of dealing with this problem, and that each carries its own difficulties. I have opted for simply dropping the demonstrative *selbst*. In English we only need to say "in it," "in itself," "for it," "for itself." I have rejected the current widespread convention of translating *an ihm selbst* as "in its own self," for two reasons. For one thing, the formula is more of a gloss than a translation. The German phrase that it translates would be *an seinem eigenen Selbst*, an expression that carries the connotations of "on its own account," exactly the formula sometimes used to translate Hegel's *für sich sein*. Mind you, no German is likely to say *an seinem eigenen Selbst*; but neither would an English person say "in its own self." Another reason is that here more than anywhere else the use of "self" as noun can be misleading because it suggests a subjectivity which is not in the German text. Regarding *für sich selbst*, I have avoided as a general rule the currently often used "on its own account" – not because the formula is necessarily wrong (I have occasionally used it myself) but because it is unduly verbose and not necessary; the simpler "for itself" suffices.

I admit that the use of "in it" as a translation of *an ihm selbst* was often problematic. It failed in context to identify its referent unambiguously. I have often replaced it, therefore, with "within it" or adverbially simply with "within," and occasionally with "internally" – in all cases hoping to retain the contrast with the "out," the "without," or the "external other," which is in Hegel's mind. Despite these difficulties, one advantage is that the English text has been rid of otherwise innumerable instances of the "self" used as noun whereas its counterpart in German is only demonstrative.

I have often replaced "in itself" with "within itself." *An sich* and *für sich* can often be translated conveniently as simply "implicitly" and "explicitly" respectively. I saw no way of rendering in English the distinction between *an* and *in* consistently. Besides, I am not sure that there is a clear difference in German.

Finally, *in sich (selbst)*, used in connection with *Reflexion* (for instance, as in *Reflexion-in-sich-selbst*) contrasts in meaning – though not always explicitly so – with *mit sich (selbst)*, this last used in connection with such term as "equality" or "unity" to express a state of immediacy (for instance, as in *Gleichheit mit sich*). I have translated the *in sich (selbst)* with "immanent" (cf. GW 12, 35.1–2, where Hegel uses *immanente Reflexion*) and the *mit sich (selbst)* with "self-" as, for instance, in "self-equality."

Ansichsein. "Being-in-itself" is the normal translation, especially when contrasted with *Fürsichsein*, "being-for-itself." But I have also rendered *Ansichsein* as "the in-itself" and "the in-itselfness."

aufheben, ***Aufhebung***. The commonly accepted translations of these terms are "to sublate" and "sublation." These are terms of art which were originally coined by Stirling precisely for the purpose of translating the corresponding German words but have now made their way into the *OED*. Much as I have tried to replace them with words that are just as common in English as the German equivalents are in German, and having even experimented for a while with Suchting's suggestion of "to suspend" and "suspension," I finally had to give up and return to the traditional translations of "to sublate" and "sublation." The fact is that the only common English word which would somewhat adequately render the double meaning of the German *aufheben* is the lowly "to take up" (which, incidentally, is the translation of the Latin *tollere* from which "to sublate" was coined). "To take something up" means "to take it away" while at the same time to "appropriate it." But "to take" is in English an all too widely used word, and with too many shades of different meanings, to allow the technical narrowing that Hegel has in mind.

Begriff. Following Geraets/Suchting/Harris, I have departed from long-standing usage and have translated *Begriff* as "concept" rather than as "notion." B. C. Burt also used "concept" in his 1896 translation of Erdmann's *Outlines of Logic and Metaphysics*, for the very good reason that "notion" carries the connotation of being a subjective representation.[13] Its meaning is also much too vague. It should be reserved for precisely such contexts as require a term without too precise a meaning. "Concept"

[13] J. E. Erdmann, *Outlines of Logic and Metaphysics*, trans. B. C. Burt (New York, 1896), pp. xiv–xv.

has the further advantage of being patently connected with "to conceive," just as *Begriff* is connected with *greifen*, and can easily be expanded into "conceptual" and "conceptually grasped" or replaced, if need be, with "comprehension" and "conceptually comprehended."

Beziehung and ***Verhältnis*** and the related verbs ***sich beziehen*** and ***sich verhälten***. This distinction is conceptually very important and crucial to the development of the Logic. Quite generally, *Beziehung* affects the terms that enter into it externally or reflectively, whereas *Verhältnis* affects them substantially. To differentiate the two terms by translating them as "relation" and "relationship" respectively is not wrong. "Relationship," moreover, might also well convey the right nuance of "family [as contrasted with 'external'] relation." But all this is much too vague. I have followed, therefore, the convention already adopted in *The Jena System, 1804–5: Logic and Metaphysics* (1985) by reserving "relation" ("relating," "relating oneself") for *Verhältnis* and "connection" for *Beziehung*. To "connection," however, I have also added "reference" and "connecting reference." In this I follow Stirling who renders *Beziehung* as "reference," and then glosses the term in his usual rich language with "be-drawing" or "drawing together" or "connection" (*The Secret of Hegel*, p. 479). It is instructive to note that as the Logic progresses from the immediacy of the categories of "being" to the reflectivity of those of "essence," *Beziehung* naturally shifts in nuance of meaning from plain "connection" to reflective "reference" or "connecting reference." *Verhältnis* comes into its own only in connection with "concept" and "idea." It must be added that *Verhältnis* also connotes "behavior" or "comportment" (*sich verhalten* means "to behave" or "to comport oneself"), and that there are passages in which this nuance of meaning needs to be brought out. For a passage in which *Beziehung* and *Verhältnis* are used in contrast to each other, cf. GW 11, 353.32–354.6. In mathematical contexts, especially in connection with Hegel's discussion of calculus, *Verhältnis* is to be translated as "ratio."

Dasein and ***Existenz***. The widely accepted translation of *Dasein* is "determinate being." This is not incorrect, but it is not sufficiently precise. All *Dasein* is "determinate being," but not all "determinate being" is merely *Dasein*. Moreover, using "determinate being" makes the task of translating such derivatives as *seiend*, *Seiendes*, and *Daseiendes*, practically impossible or at least very cumbersome. One must fall back on long circumlocutions. The "thereness" and "there-being" in Geraets/Suchting/Harris (to which Suchting, however, objects, pp. xxxvi–xxxviii) were also used by Stirling and Burt. They are not wrong, but the problem with them, besides their unusualness and the difficulties that they too create in translating

opposite of what one would expect. In that one case, I have translated it as "differentiation" (GW 21, 144.8–9).

Einzeln and ***Individuum***. *Einzeln* is normally translated as "individual," but I have regularly used "singular" instead in order to reserve "individual" for *Individuum*. The latter signifies in Hegel's usage a special kind of individuality, one which is best realized in a person but for which we can see at least a first delineation in any internally organized object such as a living being. (Cf. GW 12, 144.3–11, where Hegel gives a broad definition of *Individuum*; also 12, 31ff., where the term is applied to living things, and 12, 189.21–25, where it is used in contrast to *Einzelnheit*.) I recognize that "singular" and "singularity" sometimes tend to denote "peculiar" and "peculiarity," but they do not have to, and in context do not.

erkennen and ***wissen***, and related nouns ***Erkenntnis*** and ***Wissen***. The difference in German between the two verbs is basically idiomatic. Both verbs can be used transitively and intransitively, but in different contexts. It is helpful to think of *erkennen* as a kind of "recognition"; for *wissen*, the English of the King James Bible can help: "Wist ye not that I must be about my Father's business?" (Luke 2:49). The idiomatic difference points to a difference in meaning nuance that can be lost if one translates both with "to know," and, since Hegel bases a conceptual difference on this nuance, it must be protected. *Wissen* carries the connotation of "being aware of"; *erkennen*, of "being acquainted with." Accordingly, Hegel uses *Erkenntnis* in the specialized meaning of ratiocinative knowledge. By contrast, *Wissen*, like both "wisdom" and "faith," connotes direct apprehension. It signifies the product or the origin, rather than the process, of reason. I have therefore followed the now common practice of translating *erkennen* and *Erkenntnis* with "cognize" and "cognition" respectively, though I do it reluctantly because "cognize" and "cognition" tend to make the already ponderous prose of the Logic even more ponderous. In places, where meaning is not at stake, I have not hesitated to replace inflected verbal forms such as "cognizing" with the plain "knowing."

Gegenstand and ***Objekt***. I have already indicated in the body of the Introduction the difference between these two terms. The clue for how to differentiate them in English can be obtained from what amounts basically to an idiomatic difference. In English, we say "the subject matter of a science"; the Germans say "the object (*Gegenstand*) of a science." "Subject matter" renders quite well the meaning of *Gegenstand* precisely as "material object," *objectum quod*. This is how I have translated it, reserving "object" for *Objekt*. In a few cases, where the context is clearly phenomenological, I have used "intended object" for *Gegenstand*, and in yet others, where

Hegel refers to mathematical entities or where he cites other philosophers (notably Kant), I have used "object." There is no other way of referring to a "triangle," for instance, than as a "mathematical object." And as for the other philosophers whom Hegel cites and often criticizes, the difficulty is precisely that in the context of their philosophy it is impossible to draw the precise distinction between *Gegenstand* and *Objekt* that Hegel has in mind. Regarding *Objektivität*, which I translate as "objectivity," two important texts can be found in GW 11, 324.19–22 and 12, 126ff. For the adjectival form, *gegenständlich*, I had no choice but to use "objective."

das Ideelle. Miller translates the term as "the ideal," but enters the German in square brackets; Geraets/Suchting/Harris also translate it as "the ideal," but enter an explanatory note in the Glossary. I have tried to get away from "ideal" because the common meaning of this English word, just like that of its German counterpart (*das Ideal*), is misleading. *Ideell* has nothing to do, except in a derivative sense, with an ideal state or situation which is archetypical or "perfect in its kind" (*OED*, *sub voce*; see also GW 21, 137 and Hegel's note). An *Ideelles* is rather an object which, in being *in itself* and even *for itself*, at the same time refers to an *other* that transcends it – an "other" with respect to which it is both identical yet differentiated. Hegel's typical example of an *Ideelles* is "the finite." Something finite is a reality whose whole truth lies in the "infinite" that transcends it – a transcendent "infinite" which is nevertheless present in it, inherent in its very structure as "finite." However, that such is the truth of anything finite is made explicit only in the conceptual medium of spirit's reflection. The *Ideelles* is an *Objekt*, the product or achievement of spiritual activity (GW 21, 142–150). I have translated it with "idealization" for several reasons: (1) because the word, just like *Ideelles*, denotes an achievement rather than just a physical state of being; (2) because an "idealization" stands to the idealized in the relation just defined, that is, as bringing to light what is essential to the latter; (3) because the word retains the connection with "representation" which Hegel also has in mind (cf. GW 21, 143.5); (4) and because, just like its German counterpart, the word also carries the pejorative meaning of "*mere* idealization" from which Hegel wants to rescue it.

Sache. In non-technical contexts, the term can and should be translated in a variety of ways, such as "substance," or even "thing." As a category, however, "fact" seems to be the best rendering. *Sache*, like "fact," denotes a thing or a situation which we understand to implicitly contain all the factors required for an explanation of its existence. Its presence cannot therefore be doubted even when those factors have yet to be made explicit. The related word, *Tatsache*, was first coined by the theologian Johann

Joachim Spalding precisely in order to translate the English term "matter of fact" as used by Joseph Butler in *The Analogy of Religion* (1736).[14]

Schein. Hegel says: "Der Schein is dasselbe, was die *Reflexion* ist; aber er ist die Reflexion als *unmittelbar*" (GW 11, 249.21–22). *Schein* is generated by reflection inasmuch as the movement of the latter, in arriving at a would-be term, immediately turns back from it (*kehrt züruck*), annuls it as its end-term, and thereby returns to that from which it had begun – only, however, in order to perform there the same move of turning back and returning. "Die Reflexion . . . , die Bewegung des Nichts durch Nichts zu sich selbst züruck, ist das Scheinen *seiner* in einem *andern*" (GW 11, 292.11–12). It is a movement which, on the face of it, offers no fixed point of reference. Just like a play of lights, it might be taken as an illusion. But there is nothing illusionary about it because, on the contrary, its reality is totally exhausted by what it is *simply on the face of it* – that is, it is movement simply *as* movement, self-referring *as* referring to an other. Anyone as sensitive to literature as Hegel was would have associated the term with the quip from an early play of Lessing that Mendelssohn cited to Jacobi as an example of the kind of doubt that common sense cannot countenance. "Oh yes! Ghosts have their fun! That's no real flame there. It only looks like a flame! It's not burning; it only seems to burn! It's not shining; it only seems to shine. [*Das scheint nicht, das scheint nur zu scheinen*.] There is no lighting a real light from such a ghostly one!" (*Die Matrone von Ephesus*, Act I, Scene 2). *Schein* can be, however, the source of delusions, notably of the mistake of thinking that there must be for it some stabilizing factor outside it. Hegel's subsequent logical moves consist precisely in demonstrating that any stabilizing determination must be sought within the very movement of reflection of which *Schein* is the immediate presentation. There is no simple or single way of translating the term in English. In German, *Schein* and *scheinen* can mean "shine" and "to shine," but "semblance" and "to seem" just as well. I have chosen "shine," both as noun and intransitive verb, in an effort to retain the metaphor of "light" which is at least partly behind Hegel's choice of *Schein*. (Cf. GW 11, 391.38–392; 11, 393.13–15: "Just as the *light* of nature is not a something, nor is it a thing, but its being is rather only its shining, so manifestation is self-identical absolute actuality.") Admittedly, "shine" and "to shine" do not sit well in a procession of logical categories. For this reason, I have normally accompanied the terms with "reflective" and "reflectively"

[14] See Reinhart Staats, "Der theologischgeschichtliche Hintergrund des Begriffs 'Tatsache,'" in *Zeitschrift für Theologie und Kirche*, 70 (1973), 316–345.

respectively – except in contexts where Hegel himself explicitly uses the terms in connection with "reflection" – in order to signal the fact that the terms are used technically, in a specifically contrived sense. In very few instances, as required by context, I have also used "semblance" and "to seem" (for instance, in GW 11, 251.31; 12, 133.14; 12, 177.16).

selbstständig. I have translated this term with "self-subsistent," except in mathematical contexts, and also in connection with "relation," where I have used "independent."

Unterschied and ***Verschiedenheit***. The problem with this pair of terms is that the area of meaning that they cover is the same as is covered in English by the three terms "difference," "distinction," and "diversity." It is difficult to correlate the two German terms with the three English ones. I agree with Suchting (versus Harris/Geraets, p. xlv) that the natural way of translating *Unterschied* is "difference." We say "specific difference" where the Germans say *spezifischer Unterschied*. *Verschiedenheit*, for its part, is naturally translated as "diversity." However, although this distinction is easy to pin down in principle, it does not always hold in fact. In different contexts, *Unterschied* also calls for "distinction," and *Verschiedenheit* for "difference." In English, "distinction" tends to be a difference *in dictu*; "difference," one *in re*. I have used this rough rule as a guide when translating *Unterschied* as "distinction," though I must admit that on occasions I had to rely simply on my intuitive sense of the text. It was more difficult to come up with even a rough rule for *Verschiedenheit*. "Diversity" tends to stress the plurality and variety of the things (or the moments of one single object) that are different, their "being versed in different directions," so to speak, and therefore standing apart, each reflected into itself (cf. GW 11, 267.5–6); "difference" tends to stress what makes them different. This is the image that I have kept in mind when translating *Verschiedenheit* with "difference" rather than with the more canonical "diversity." But here, more so than in the case of *Unterschied*, I often had to rely on intuition.

Vorstellung. The normal translation of this term is "representation." But Hegel uses it in different contexts in two quite distinct senses – in a generic sense that would include the specific type of representation which is the concept; and in a narrower sense which is normally associated with "imagination" and is opposed to "concept." In this last sense, it can be translated in a variety of ways – for instance, as "ordinary representation," "figurative representation," or "representation of the imagination."

zu Grunde gehen. This is a common German expression normally translated as "to perish." But Hegel often plays on the word *Grund* ("ground" or "foundation") in order to make a conceptual point. In an effort at saving

the image behind the German expression, I have translated it as "to founder"; "to founder to the ground"; and "to founder, thus sinking to the ground."

THE TEXT OF THE PRESENT TRANSLATION

In producing this translation, I have consulted the critical edition of the text in Volumes 21, 11, and 12 of the *Gesammelte Werke*. I have also learned immensely from the critical apparatus of these volumes. I have consulted all past English translations and have used the excellent Moni/Cesa Italian translation as a control. The translation itself, however, is original, and it is made from the Georg Lasson text (1923/1932). This text rarely diverges from that of the critical edition, and, when it diverges, never does so significantly. The pagination in margins refers to the text of the *Gesammelte Werke*, by volume and page number. Footnotes numbered in Arabic are Hegel's own.

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The Science of Logic

by

Georg Wilhelm Friedrich Hegel

VOLUME ONE

The Objective Logic
Book One
The Doctrine of Being

PREFACE TO THE FIRST EDITION

The complete transformation that the ways of philosophical thought have undergone among us in the past twenty-five odd years, the higher standpoint in self-awareness that spirit has attained in this period of time, has so far had little influence on the shape of the *logic*.

What was hitherto called "metaphysics" has been, so to speak, extirpated root and branch, and has vanished from the ranks of the sciences. Where are the voices still to be heard of the ontology of former times, of the rational psychology, the cosmology, or indeed, even of the natural theology of the past, or where are they allowed to be heard? Inquiries, for instance, into the immateriality of the soul, into mechanical and final causes – where is interest in them still to be found? Even the former proofs of God's existence are cited only out of historical interest, or for the purpose of edification and the uplifting of the mind. The fact is that interest, whether in the content or in the form of the former metaphysics, or in both together, has been lost. Remarkable as it is if a people has become indifferent, for instance, to its constitutional law, to its convictions, its moral customs and virtues, just as remarkable it is when a people loses its metaphysics – when the spirit engaged with its pure essence no longer has any real presence in its life.

The exoteric teaching of the Kantian philosophy – that the *understanding ought not to be allowed to soar above experience*, lest the cognitive faculty become a *theoretical reason* that by itself would beget nothing but *mental fancies* – this was the justification coming from the scientific camp for

renouncing speculative thought. In support of this popular doctrine there was added the cry of alarm of modern pedagogy, that the pressing situation of the time called for attention to immediate needs – that just as in the ways of knowledge experience is first, so for skill in public and private life, exercise and practical education are the essential, they alone what is
21.6 required, while theoretical insight is even harmful. – With science and common sense thus working hand in hand to cause the downfall of metaphysics, the singular spectacle came into view of *a cultivated people without metaphysics* – like a temple richly ornamented in other respects but without a holy of holies. – Theology, which in former times was the custodian of the speculative mysteries and of the albeit subordinate metaphysics, had relinquished this last science in exchange for feelings, popular practicality, and erudite historiography. And it was in keeping with this change that, for their part, those solitary individuals, whom their people had exiled from the world and dedicated to the contemplation of the eternal, also disappeared. Theirs was a life devoted exclusively to the service of contemplation, without practical gain but only for the sake of blessedness, and their disappearance can be regarded as essentially the same phenomenon, though in a different context, as the one just mentioned. – And so this darkness, this colorless self-preoccupation of spirit bent upon itself, having been dispelled, existence shone transformed into the bright world of flowers – of which, as is well known, none is *black*.

Logic did not fare quite as badly as metaphysics. That from logic one *learns how to think*, which for lack of anything else was considered its usefulness and therefore its purpose – just as if one were to learn how to digest or to move first from the study of anatomy and physiology – this is a prejudice that has long been put to rest, and in this respect the spirit of practicality certainly did not intend any better fate for logic than it did for its sister science. Nevertheless, probably for the sake of a certain formal utility, a place was still allowed for it among the sciences; it was even retained as a subject of public instruction. However, this better lot concerns only the outer fate of logic, for its shape and content have remained the same throughout a long inherited tradition, though progressively more diluted and emaciated in the course of the transmission; no trace is so far to be detected in it of the new spirit that has awakened in the sciences no less than in the world of actuality. However, once the substantial form of the spirit has reconstituted itself, it is of no avail to want to retain the forms of an earlier culture. These are like withered leaves pushed aside by the new buds already being generated at their roots.

Also in the scientific realm this *ignoring* of the universal change is gradually beginning to lose ground. The new ideas have imperceptibly become the accepted currency even to those opposed to them. And if these continue to fuss about their sources and principles and to dispute them, they have **21.7** nevertheless surrendered to their consequences, unable to fend off their influence. They have no other way of giving a positive importance, and some content, to their increasingly irrelevant negative attitude, except by falling in with the new ways of thinking.

However, the period of fermentation that goes with the beginning of every new creation seems to be past. In its first manifestation, a new creation usually behaves towards the entrenched systematization of the earlier principle with fanatical hostility; in fear of losing itself in the expansion of the particular, it also shuns the labor that goes with scientific cultivation and, nevertheless in need of it, it grasps at first at an empty formalism. The demand for the elaboration and cultivation of the material becomes at that point all the more pressing. There is a period in the formation of an epoch in which, just as in the formation of the individual, the foremost concern is the acquisition and reinforcement of the principle in its undeveloped intensity. But the higher demand is that such a principle should be made into science.

Now, whatever might already have happened to the substance and form of science in other respects, the science of logic that makes up metaphysics proper or pure speculative philosophy has to date been much neglected. What I more precisely understand by this science and its standpoint, I have provisorily stated in the *Introduction*. The fact that it was necessary to make a completely fresh start with this science, the nature itself of its subject matter, and the lack of any previous work that could have been used for the undertaken reform of it, may be taken into account by the fair-minded critic if even a labor of many years was unable to give this effort a greater perfection. – The essential point to be kept in mind is that an altogether new concept of scientific procedure is at work here. As I have remarked elsewhere,[a] inasmuch as philosophy is to be science, it cannot borrow its method from a subordinate science, such as mathematics, any more than it can remain satisfied with categorical assurances of inner intuition, or can make use of argumentation based on external reflection. On the contrary, it can only be *the nature of the content* which is responsible for *movement*

[a] *Phenomenology of Spirit*, Preface to the first edition. [GW 9, pp. 31, 33–36] – The actual demonstration is the cognition of the method, such as has its place in the logic itself.

21.8 in scientific knowledge, for it is the content's *own reflection* that first posits and *generates what that content is*.

The *understanding determines*, and holds the determination fixed. *Reason* is negative and *dialectical*, since it dissolves the determinations of the understanding into nothing; it is *positive*, since it generates the *universal*, and comprehends the particular therein. Just as the understanding is usually taken as something separate from reason in general, so also dialectical reason is taken as something separate from positive reason. In its truth reason is however *spirit*, which is higher than both reason bound to the understanding and understanding bound to reason. It is the negative, that which constitutes the quality of both the dialectical reason and the understanding: it negates the simple, thereby posits the determinate difference of the understanding; but it equally dissolves this difference, and so it is dialectical. But spirit does not stay at the nothing of this result but is in it rather equally positive, and thereby restores the first simplicity, but as universal, such as it is concrete in itself; a given particular is not subsumed under this universal but, on the contrary, it has already been determined together with the determining of the difference and the dissolution of this determining. This spiritual movement, which in its simplicity gives itself its determinateness, and in this determinateness gives itself its self-equality – this movement, which is thus the immanent development of the concept, is the absolute method of the concept, the absolute method of cognition and at the same time the immanent soul of the content. – On this self-constructing path alone, I say, is philosophy capable of being objective, demonstrative science. – In this fashion have I tried to portray *consciousness* in the *Phenomenology of Spirit*. Consciousness is spirit as concrete, self-aware knowledge – to be sure, a knowledge bound to externality, but the progression of this subject matter, like the development of all natural and spiritual life, rests exclusively on the nature of the *pure essentialities* that constitute the content of the logic. Consciousness, as spirit which on the way of manifesting itself frees itself from its immediacy and external concretion, attains to the pure knowledge that takes these same pure essentialities for its subject matter as they are in and for themselves. They are pure thoughts, spirit that thinks its essence. Their self-movement is their spiritual life and is that through which science constitutes itself, and of which it is the exposition.

The connection of the science that I call *Phenomenology of Spirit* to the Logic is thereby stated. – As regards the way it stands to it exter-
21.9 nally, a second part was intended to follow the first part of the *System*

of Science[b] that contains the Phenomenology. This second part would have contained the Logic and both the two real sciences of philosophy, the Philosophy of Nature and the Philosophy of Spirit, and would have brought the system of science to completion. However, the necessary expansion which the Logic demanded by itself has led me to have this particular part published separately. It therefore constitutes the first sequel to the *Phenomenology of Spirit* in an expanded plan of the system of science. I shall later follow up with a treatment of both the two mentioned real sciences of philosophy. – This first volume of the Logic contains the Doctrine of Being, as Book One; Book Two, the second section of the same volume which contains the Doctrine of Essence is already in the presses; finally, the second volume will contain the Subjective Logic, or the Doctrine of the Concept.

Nürnberg, March 22, 1812 **21.10**

PREFACE TO THE SECOND EDITION

I undertook this revision of the Science of Logic, of which the first volume is hereby being published, in full consciousness not only of the difficulty of its subject matter and of its exposition besides, but equally of the imperfection from which its treatment in the first edition suffers. As earnestly as I have striven after many years of further occupation with this science to remedy this imperfection, I still feel that I have cause enough to appeal to the reader's indulgence. One title to such appeal in the first instance may well be based on the circumstance that for the most part only external material was available for its content in the earlier metaphysics and logic. Although the practice of these disciplines had been universal and customary, in the case of logic down to our own time, its interest in their speculative side has been just as universally and customarily restricted. It is the same material which is repeated over and over again, whether it is thinned out to the point of trivial superficiality, or whether the ancient ballast is freshly trotted out and dragged to new lengths, so that, through these habitually only mechanical efforts, no gain could be had for the philosophical content. To display

[b] (Bamberg and Würzburg: at Göbbard's, 1807). This title [i.e. "First Part of the System of Science"] will no longer be added to the second edition to be published this coming Easter. – In place of the intended second part here mentioned, which was to contain the complement of the other philosophical sciences, I have since brought out the *Encyclopedia of the Philosophical Sciences*, in its third edition last year. [1832]

the realm of thought philosophically, that is, in its own immanent activity or, what is the same, in its necessary development, had to be, therefore, a new undertaking, one that had to be started right from the beginning. Nevertheless, the received material, the known thought-forms, must be regarded as an extremely important fund, even a necessary condition, a presupposition to be gratefully acknowledged even though what it offers here and there is only a bare thread, the dead bones of a skeleton thrown together in a disorderly heap.

The forms of thought are first set out and stored in human *language*, and one can hardly be reminded often enough nowadays that thought is what differentiates the human being from the beast. In everything that the human being has interiorized, in everything that in some way or other has become for him a representation, in whatever he has made his own, there has language penetrated, and everything that he transforms into language and expresses in it contains a category, whether concealed, mixed, or well defined. So much is logic natural to the human being, is indeed his very *nature*. If we however contrast nature as such, as the realm of the
21.11 physical, with the realm of the spiritual, then we must say that logic is the supernatural element that permeates all his natural behavior, his ways of sensing, intuiting, desiring, his needs and impulses; and it thereby makes them into something truly human, even though only formally human – makes them into representations and purposes. It is to the advantage of a language when it possesses a wealth of logical expressions, that is, distinctive expressions specifically set aside for thought determinations. Many of the prepositions and articles already pertain to relations based on thought (in this the Chinese language has apparently not advanced that far culturally, or at least not far enough), but such particles play a totally subordinate role, only slightly more independent than that of prefixes and suffixes, inflections, and the like. Much more important is that in a language the categories should be expressed as substantives and verbs, and thus be stamped into objective form. In this respect, the German language has many advantages over other modern languages, for many of its words also have the further peculiarity of carrying, not just different meanings, but opposite ones, and in this one cannot fail to recognize the language's speculative spirit. It can delight thought to come across such words, and to discover in naïve form, already in the lexicon as one word of opposite meanings, that union of opposites which is the result of speculation but to the understanding is nonsensical. Philosophy, therefore, stands in no need of special terminology; true, some words are to be taken from foreign languages; yet, through use these have already acquired citizenship in it and

an affected purism would be all the more out of place where everything depends on meaning the most. – The advance of culture in general and of the sciences in particular, even the empirical sciences which are bound to the senses and generally operate in the medium of the most common categories (e.g. whole and parts, a thing and its properties, and the like), gradually fosters the rise of thought-relations that are also more advanced, or it at least raises them to wider universality and consequently brings them to greater notice. In Physics, for instance, where the predominant category previously was that of *force*, it is the category of *polarity* that now plays the most significant role – a category which, incidentally, is randomly being imposed all too often on everything, even on light. It defines a difference in which the different terms are *inseparably* bound together, and it is indeed of infinite importance that an advance has thereby been made beyond the abstractive form of identity, by which a determinateness such as for example that of force acquires independent status, and the determining form of difference, the difference that at the same time remains an inseparable moment of identity, is instead brought to the forefront and is given general acceptance. The study of nature, because of the stable reality of its objects, is inevitably led to fix categories that can no longer be ignored in it, even if **21.12** with complete disregard for consistency towards other categories which are *also* allowed to stand; it is not given room for abstracting from opposition and moving on to generalities, as so easily happens when spirit is the object.

But even when logical matters and their expressions are common coin in a culture, still, as I have said elsewhere,[1] *what is familiar* is for that reason *not known*, and it can even be a source of irritation to have to occupy oneself with the familiar – and what could be more familiar than just those determinations of thought which we employ everywhere, and are on our lips in every sentence that we utter? To indicate the general features of the course that cognition goes through as it leaves familiar acquaintance behind, the essential moments in the relationship of scientific thought to this natural thought, this is the purpose of the present preface. Together with the earlier *Introduction*, it will suffice for a general idea of what is meant by logical cognition – the kind of general idea which is demanded of a science prior to the science itself.

First of all, it must be regarded as an infinite step forward that the forms of thought have been freed from the material in which they are submerged in self-conscious intuition, in representation, as well as in our desires and volitions or, more accurately, in ideational desiring and willing (and there

[1] In the Preface to the *Phenomenology of Spirit*, GW 9, 26.21.

is no human desire or volition without ideation); a step forward that these universalities have been brought to light and made the subject of study on their own, as was done by Plato, and after him by Aristotle especially; this step marks the beginning of our knowledge of them. "Only after almost everything which is necessary to life, and pertains to its comfort and sociability, was made available," says Aristotle, "did man begin to trouble himself with philosophical knowledge."[2] "In Egypt," he had previously remarked, "there was an early development of the mathematical sciences because there the priestly caste were brought early to a state of leisure."[3] – Indeed, the need to occupy oneself with pure thoughts presupposes a long road that the human spirit must have traversed; it is the need, one may say, of having already attained the satisfaction of necessary need, the need of freedom from need, of abstraction from the material of intuition, imagination, and so forth; from the material of the concrete interests of desire, impulse, will, in which the determinations of thought hide as if
21.13 behind a veil. In the silent regions of thought that has come to itself and communes only with itself, the interests that move the life of peoples and individuals are hushed. "In so many respects," says Aristotle in the same context, "is human nature in bondage; but this science, which is not pursued for any utility, is alone free in and for itself, and for this reason it appears not to be a human possession."[4] Philosophical thinking in general still deals with concrete subject matters, with God, Nature, Spirit; but logic occupies itself exclusively with these thoughts as thought, in complete abstraction by themselves. For this reason it is customary to reserve it for the instruction of youth, for youth is not yet involved in the practical affairs of concrete life but lives a life of leisure so far as these are concerned, and it is only for its own subjective ends that it has to busy itself acquiring – at the level of theory at least – the means that will eventually enable it to become actively engaged in the objects of those practical interests. Contrary to Aristotle's view just mentioned, the science of logic is counted among these *means*; the study of it is a preliminary labor and its place is the school, while the seriousness of life and the active pursuit of substantial ends are left for later. In real life, it is then a matter of *making use* of the thought determinations. From the honor of being contemplated for their own sake, such determinations are debased to the position of *serving* in the creation and exchange of ideas required for the hustle and bustle of social life. They are in part used as *abbreviations*, because of their universality. Indeed, what an infinite host of particulars relating to external existence and to action

[2] Aristotle, *Metaph.*, 982b. [3] Aristotle, *Metaph.*, 981b. [4] Aristotle, *Metaph.*, 982b.

are summed up in a representation, for instance, of battle, war, nation, or of sea and animal, etc.! And also, what an infinite host of images, actions, situations, etc. are epitomized in the representation of God, or of love, etc., epitomized in the *simplicity* of this way of representing! In part they are also used for the closer specification and discovery of *objective relations*, but in this role the content and the purpose of the thought involved, its correctness and truth, are made to depend entirely on the given data, and the thought determinations are not themselves credited with any active function in the determination of content. The use of thought determinations that we earlier called "natural logic" is unconscious; and when in science this role of serving as means is reflectively attributed to them, then thinking as such is made subordinate in the life of spirit to the other spiritual activities. We do not indeed say of our feelings, impulses, interests, that they serve us; on the contrary, they count as independent forces and powers, so that to have this particular feeling, to desire and to will this particular thing, to make this our interest – just this, is what we are. And it is more likely that we become conscious of obeying our feelings, impulses, passions, interests, not to mention our habits, than of having them in our possession, still less, in view of our intimate union with them, of their being means at our **21.14** disposal. Such determinations of mind and spirit, when contrasted with the *universality* which we are conscious of being and in which we have our freedom, quickly show themselves to be *particulars*, and we rather regard ourselves to be caught up in their particularities and to be dominated by them. It is all the less possible, therefore, to believe that the thought determinations that pervade all our representations – whether these are purely theoretical or hold a material belonging to sensation, impulse, will – that such thought determinations are at our service; that it is we who have them in our possession and not they who have us in theirs.[5] What is there of more in *us* as against them? How would *we*, how would *I*, set myself up as the superior universal *over* them – they that are the universal as such? When we give ourselves up to a sensation, a purpose, an interest, and feel restricted therein, feel unfree, then the place where we can withdraw from

[5] There seems to be an allusion here to the question that Friedrich Heinrich Jacobi raised in Supplement VII of the second edition of F. H. Jacobi, *Über die Lehre des Spinoza in Briefen an den Herrn Moses Mendelssohn* (Breslau, 1789): "Is man in possession of reason, or reason in possession of man?," p. 422. *Werke*: Gesamtausgabe, Series 1, Vol. 1, pp. 247–265. For an English translation, *Concerning the Doctrine of Spinoza in Letters to Herr Moses Mendelssohn*, see F. H. Jacobi, *The Main Philosophical Works and the Novel* Allwill, trans. and ed. George di Giovanni (Montreal and Kingston: McGill-Queen's University Press, 1994), p. 375. Jacobi returned to the question in Supplement II to *Jacobi an Fichte* (Hamburg,1799) pp. 65ff., *Jacobi to Fichte*, pp. 528ff. of the English translation.

it back into freedom is this area of self-certainty, of pure abstraction, of thought. Or again, when we speak of *things*, we call their *nature* or *essence* their *concept*, and this concept is only for thought; but still less shall we say of the concepts of things that we dominate them, or that the thought determinations of which they are the complex are at our service. On the contrary, our thought must accord with them, and our choice or freedom ought not to want to fit them to its purposes. Thus, inasmuch as subjective thought is our own most intimately inner doing, and the objective concept of things constitutes what is essential to them, we cannot step away from this doing, cannot stand above it, and even less can we step beyond the nature of things. We can, however, dispense with this last claim; inasmuch as it is symmetrical with the one preceding it, it says that our thoughts have a reference to the essence of things; but this is an empty claim, for the essence of things would then be set up as the rule for our concepts whereas, for us, that essence can only be the concepts that we have of the things. The way in which critical philosophy understands the relation of these *three termini* is that we place *thoughts* as a medium between *us* and the *things*, in the sense that this medium, instead of joining us with such things, would rather cut us off from them. But this view can be countered by the simple remark that these same things that are supposed to stand at the opposite extreme beyond us and beyond the self-referring thoughts, are themselves things of thought[6] which, taken as entirely indeterminate, are only one thing (the so called thing-in-itself), the thought product of pure abstraction.

Enough said to dispel any notion that thought determinations are only for use, are only a means; more important is the related further notion
21.15 that they are external forms. – The activity of thought at work in us across all representations, interests, and actions is, as we have said, unconsciously busy (the natural logic); explicit consciousness is of the content, the subject matters of representations, all the things that interest us; taken in this relation, thought determinations are generally taken to be *forms* that only attach to *the content* without however being this content itself. But if the truth of the matter is as was already stated and is otherwise generally admitted, that the *nature*, the specific *essence*, that which is truly *permanent* and *substantial* in the manifold and accidentality of appearance and fleeting externalization, is the *concept* of the thing, *the universal which is present in it* just as there is present in each human being, although universally unique, a specific *principle* that makes him human (or in each individual animal

[6] *Gedankendinge*, i.e. the scholastic *entia rationis*.

a specific *principle* that makes it animal): if this is true, then there is no saying what such an individual could still be if this foundation were removed from him, no matter how many the predicates with which he would still be otherwise adorned – if, that is, such a foundation can be called a predicate like the rest. The indispensable foundation, the concept, the universal which is thought itself (provided that with the word "thought" one can abstract from figurative representation), cannot be regarded as *just* an indifferent form that attaches *to* a content. But these thoughts of all things natural and spiritual, even the substantial *content*, still contain a variety of determinacies and are still affected by the distinction of soul and body, of concept and reality relative to it; the profounder foundation is the soul standing on its own, the pure concept which is the innermost moment of the objects, their simple life pulse, just as it is of the subjective thinking of them. To bring to consciousness this *logical* nature that animates the spirit, that moves and works within it, this is the task. The broad distinction between instinctive act and act which is intelligent and free is that the latter is performed consciously; when the content that motivates a subject to action is drawn out of its immediate unity with the subject and is made to stand before it as an object, then it is that the freedom of spirit begins, the same spirit who, when thought is an instinctive activity, is caught up in the web of its categories and is splintered into a material of infinite variety. Here and there on this web there are knots, more firmly tied than others, which give stability and direction to the life and consciousness of spirit; they owe their firmness and power simply to the fact that, having been brought before consciousness, they stand as independent concepts of its essential nature. The most important point for the nature of spirit is the relation, not only of what it implicitly is *in itself* to what it *actually* is, but of what it *knows itself* to be to what it *actually* is; because spirit is essentially **21.16** consciousness, this self-knowledge is a fundamental determination of its actuality. As impulses the categories do their work only instinctively; they are brought to consciousness one by one and so are variable and mutually confusing, thus affording to spirit only fragmentary and uncertain actuality. To purify these categories and in them to elevate spirit to truth and freedom, this is therefore the loftier business of logic.

What we indicated as constituting the beginning of science and have just now recognized to be of great value both on its own account and as the condition of true knowledge – namely, the treatment of concepts and of the moments of the concept in general, of the thought determinations as forms that are at first different from the material and are only attached to it – this is a work that quickly gives itself away as being inherently

inadequate for the attainment of truth which is the object and purpose of logic. For as mere forms, as distinct from the content, such concepts and their moments are taken in a determination that stamps them as finite and makes them unfit to hold the truth which is in itself infinite. In whatever respect the true may otherwise be again associated with restriction and finitude, this aspect is the side of its negation, of its untruth and lack of actuality, even of its cessation, and not of the affirmation which, as the true, it is. Confronted by the barrenness of the merely formal categories, healthy common sense instinctively felt that it had the upper hand after all, and it contemptuously relinquished acquaintanceship with them to the domain of school logic and school metaphysics. In this, however, it underestimated the value that the consciousness of these threads already possesses by itself; it also did not perceive that when given over to the instinctive practices of natural logic, especially when all acquaintance and cognition of the thought determinations themselves have deliberately been rejected, it is in bondage to unclarified and therefore unfree thought. The simple basic determination or common form of the collection of such forms is *identity* which, in the logic of this collection, is asserted as the law of identity, as A = A, and as the principle of contradiction. So much has healthy common sense lost respect for the school which still holds on to such laws of truth and still busies itself with them, that it ridicules the school and regards as insufferable anyone who believes that in following such laws one actually says anything at all: the plant is a – plant; science is – science; *and so on in infinitum*. Regarding the formulas that define the rules of inference which in fact is a principal function of the understanding, however mistaken healthy common sense might be in ignoring that they have their place in cognition where they must be obeyed, and also that
21.17 they are essential material for rational thought, it has nonetheless come to the equally correct realization that such formulas are indifferently at the service just as much of error as of sophistry, and that, however truth may be defined, so far as higher truth is concerned, for instance religious truth, they are useless – that in general they have to do only with the correctness of knowledge, not its truth.

The inadequacy of this way of regarding thought which leaves truth on one side can only be remedied by including in our consideration of thought, not merely what is customarily credited to external form, but the content as well. It is soon evident that what in ordinary reflection is, as content, at first separated from the form cannot in fact be in itself formless, devoid of determination (in that case it would be a vacuity, the abstraction of the thing-in-itself); that it rather possesses form in it; indeed that it

receives soul and substance from the form alone and that it is this form itself which is transformed into only the semblance of a content, hence also into the semblance of something external to this semblance. By thus introducing content into logical consideration, it is not the *things*, but what is rather *the fact* [*Sache*], the *concept* of the things, that becomes the subject matter. In this connection, however, one must also be reminded that *there is* a multitude of concepts, a multitude of facts. One way in which limits are imposed on this multitude has already been said, that the concept as thought in general, as universal, as against the particularity of the things vaguely parading their multitudinousness before indeterminate intuition and representation, is their immeasurable abbreviation. But *a* concept is also, first of all, in itself *the* concept, and this concept is only one concept, the substantial foundation; it is of course also a *determinate* concept, and it is this *determinateness* that appears in it as content even though, in fact, it is a form determination of the substantial unity of the concept, a moment of the form as totality, *of the concept itself* which is the foundation of the determinate concepts. This concept is not intuited by the senses, is not represented in imagination; it is only subject matter, the product and content of *thought*, the fact that exists in and for itself, the logos, the reason of that which is, the truth of what we call things; it is least of all the logos that should be kept outside the science of logic. It cannot therefore be a matter of choice whether to include it within the science or leave it out. When the thought determinations which are only external forms are seriously considered in themselves, the result can only be the demonstration of their finitude and of the untruth of their supposed being-for-itself, and that the concept is their truth. Therefore, inasmuch as the science of logic deals with the thought determinations that instinctively and unconsciously pervade our spirit everywhere – and remain non-objectified and unnoticed even when they enter language – **21.18**
it will also be a reconstruction of those determinations which reflection has already abstracted and fixed as subjective forms external to a material content.

The presentation of no subject matter can be in and for itself as strictly and immanently plastic as is that of thought in its necessary development; nor would any subject matter require such a presentation; in this respect, the science of logic must surpass even mathematics, for no subject matter intrinsically possesses this freedom and independence. The presentation would demand that at no stage of the development should any thought determination or reflection occur that does not directly emerge at that specific stage and does not proceed in it from the preceding

determinations – a demand which is also to be found after a fashion in the process of mathematical inference. But I must admit that such an abstract perfection of presentation must generally be renounced; the very fact that the logic must begin with the purely simple, and therefore the most general and empty, restricts it to expressions of this simple that are themselves absolutely simple, without the further addition of a single word; only allowed, as the matter at hand requires, would be negative reflections intended to ward off and keep at bay whatever the imagination or an undisciplined thinking might otherwise adventitiously bring in. However, such intrusive elements in the otherwise simple immanent course of the development are essentially accidental, and the effort to ward them off would, therefore, be itself tainted with this accidentality; and besides, it would be futile to try to deal with them *all*, precisely because they lie outside the essence of the subject matter, and incompleteness is at best what would have to do to satisfy systematic expectations. Yet the restlessness and the distraction characteristic of our modern consciousness leave us no choice but to also take into account the more current of these reflections and these adventitious notions. A plastic discourse requires a plasticity of sense also in hearing and understanding; but youths and men of such a temper who would calmly suppress *their own* reflections and opinions in which *original thought* is so impatient to manifest itself, such listeners attentive to the facts as Plato portrayed them, could hardly be imagined in a modern dialogue; and even less could one count on readers of similar disposition. On the contrary, all too often and all too vehemently have I been confronted by opponents incapable of the simple consideration that their opinions and objections imply categories which are presuppositions and themselves in need of being criticized first before they are put to use. Lack of self-awareness in this matter is incredibly profound; it is responsible for the misunderstanding which is the cause of all others, the nasty and uneducated practice of taking for a category under consideration *something other* than this category itself. This lack of self-awareness is all the less justifiable
21.19 when this *something other* consists of determinate thoughts and concepts, and these other categories also would have to have a place in a system of logic and be subjected there to examination on their own. This is most conspicuously the case in the vast majority of the objections and attacks on the first concepts or propositions of the logic, on *being* and *nothing*, and on *becoming* which, itself a simple determination, contains (indisputably indeed, as the simplest analysis shows) the other two determinations as moments. Thoroughness seems to require that the beginning, as the foundation upon which everything else is built, should be examined before all

else, in fact that we should not proceed further until its solidity has been demonstrated, and if the contrary should be the case, that we reject all that follows. This thoroughness has the added advantage of guaranteeing that the labor of thinking is reduced to a minimum; for it has before it, enclosed in this germ, the entire development and reckons that it has settled the whole business when it has disposed of the beginning, the easiest matter to dispatch because it is the simplest, the simple itself; it is the trifling labor required for this that really recommends this "thoroughness" which is so satisfied with itself. This restriction to the simple allows free play to the arbitrariness of thought which will not itself remain simple but brings in its own reflections on the subject. Having good right to occupy itself at first *only* with the principle and therefore not to let itself be involved in *anything else*, this industrious thoroughness in fact does the very opposite, for it *does* bring in the "else," that is, other categories besides just the principle, extra presuppositions and prejudices. Such presuppositions as that infinity is different from finitude, content something else than form, the inner something else than the outer, likewise that mediation is not immediacy (as if anyone did not know these things), are didactically presented, narrated and affirmed, rather than demonstrated. There is something stupid – I have no other word for it – about this didactic mannerism; at a deeper level, there is the illegitimacy of simply presupposing and straight away accepting such propositions; still more, there is the failure to recognize that the requirement and the business of logical thinking is to investigate precisely this, whether apart from infinity a finite would be by itself something true; likewise, whether such an abstracted infinity, or whether a content without form or a form without content, an inner by itself without further externalization, an externality without inwardness, whether any of this would be *something true* or *something actual*. – But this culture and discipline of thought by which the latter acquires plasticity and overcomes the impatience of incidental reflection is procured solely by pressing onward, by study, and by carrying out to its conclusion the entire development. **21.20**

Anyone who in our times labors at erecting anew an independent edifice of philosophical sciences may be reminded, thinking of how Plato expounded his, of the story that he reworked his *Republic* seven times over. The reminder of this, any comparison, such as may seem implied in it, should only serve to incite ever stronger the wish that for a work which, as belonging to the modern world, is confronted by a profounder principle, a more difficult subject matter and a material of greater compass, the unfettered leisure had been afforded of reworking it seven and seventy times over. But the author, in face of the magnitude of the task, had to

content himself with what could be made of it in circumstances of external necessity, of the inevitable distraction caused by the magnitude and multitude of contemporary interests, all the while in doubt whether the noisy clamor of the day and the deafening chatter of a conceit that takes pride in confining itself to just these interests, might still leave room for partaking in the dispassionate calm of a knowledge dedicated to thought alone.

Berlin, November 7, 1831

Introduction 21.27

GENERAL CONCEPT OF LOGIC

In no science is the need to begin with the fact [*Sache*] itself, without preliminary reflections, felt more strongly than in the science of logic. In every other science, the matter that it treats, and the scientific method, are distinguished from each other; the content, moreover, does not make an absolute beginning but is dependent on other concepts and is connected on all sides with other material. It is therefore permitted to these sciences to speak of their ground and its context, as well of their method, in the form of lemmas;[7] to apply presupposed forms of definitions and the like without further ado, as known and accepted; and to make use of customary ways of argumentation in order to establish their general concepts and fundamental determinations.

Logic, on the contrary, cannot presuppose any of these forms of reflection, these rules and laws of thinking, for they are part of its content and they first have to be established within it. And it is not just the declaration of scientific method but the *concept* itself of *science* as such that belongs to its content and even makes up its final result. Logic, therefore, cannot say what it is in advance, rather does this knowledge of itself only emerge as the final result and completion of its whole treatment. Likewise its subject matter, *thinking* or more specifically *conceptual* thinking, is essentially elaborated within it; its concept is generated in the course of this elaboration and cannot therefore be given in advance. What is anticipated in this Introduction, therefore, is not intended to ground as it were the concept of logic, or to justify in advance its content and method scientifically, but rather to make more intuitable, by means of some explanations and reflections of an argumentative and historical nature, the standpoint from which this science ought to be considered. 21.28

[7] i.e. premises taken for granted.

Whenever logic is taken as the science of thinking in general, it is thereby understood that this "thinking" constitutes *the mere form* of a cognition; that logic abstracts from all *content*, and the so-called second *constitutive piece* that belongs to the cognition, namely the *matter*, must be given from elsewhere; hence that logic, since this matter does not in the least depend on it, can give only the formal conditions of genuine knowledge, but does not itself contain real truth; or again, that logic is only the *pathway* to real knowledge, for the essential component of truth, the content, lies outside it.

But, first, to say that logic abstracts from all *content*, that it only teaches the rule of thinking without being able to engage in what is being thought or to take its composition into consideration, this alone is already inadequate. For, since thinking and the rules of thinking are supposed to be its subject matter, in these logic already has a content specifically its own; in them it has that second constituent of knowledge, namely a matter whose composition is its concern.

But, second, the notions on which the concept of logic has generally rested so far have in part already passed away, and for the rest, it is time that they disappear altogether, that the standpoint of this science were grasped at a higher level, and that the science gained a completely altered shape.

The concept of logic has hitherto rested on a separation, presupposed once and for all in ordinary consciousness, of the *content* of knowledge and its *form*, or of *truth* and *certainty*. Presupposed *from the start* is that the material of knowledge is present in and for itself as a ready-made world outside thinking; that thinking is by itself empty, that it comes to this material as a form from outside, fills itself with it, and only then gains a content, thereby becoming real knowledge.

Further, these two component parts (for they are supposed to be related to each other as component parts, and cognition is compounded from them in a mechanical, or at best chemical, manner) are said to stand to each other in this order: the object is complete and finished all by itself and, for its actuality, can fully dispense with thought; thought, for its part, is something deficient and in need of a material in order to complete itself, and also, as a pliable indeterminate form, must adapt itself to its matter. Truth is the agreement of thought with the subject matter, and in order to produce this agreement – for it is not there on its own account – thought is expected to be subservient and responsive to the subject matter.

Third, when the difference of matter and form, of subject matter and
21.29 thought, is not left in this nebulous indeterminacy but is more specifically defined, each turns out to be a sphere divorced from the other.

Consequently, as thought receives and informs the material, it does not transcend itself but its reception of this material and its responsiveness to it remain modifications of itself; thus thought does not become its other; the self-conscious determining, at any rate, belongs only to it; even as it refers to the subject matter, therefore, it does not reach out to it outside itself; the subject matter remains a thing in itself, utterly a "beyond" of thought.

These views on the relation of subject and object to each other express the determinations that constitute the nature of our ordinary, phenomenal consciousness. However, when these prejudices are carried over to reason, as if in reason the same relation obtained, as if this relation had any truth in and for itself, then they are errors, and the refutation of them in every part of the spiritual and natural universe is what philosophy is; or rather, since they block the entrance to philosophy, they are the errors that must be removed before one can enter it.

The older metaphysics had in this respect a higher concept of thinking than now passes as the accepted opinion. For it presupposed as its principle that only what is known of things and in things by thought is really true in them, that is, what is known in them not in their immediacy but as first elevated to the form of thinking, as things of thought. This metaphysics thus held that thinking and the determination of thinking are not something alien to the subject matters, but are rather their essence, or that the *things* and the *thinking* of them agree in and for themselves (also our language expresses a kinship between them); that thinking in its immanent determinations, and the true nature of things, are one and the same content.

But the *reflection* of the understanding seized hold of philosophy. We must know exactly what is meant by this saying which is otherwise often used as a slogan. It refers in general to an understanding that abstracts and therefore separates, that remains fixed in its separations. Turned against reason, this understanding behaves in the manner of *ordinary common sense*, giving credence to the latter's view that truth rests on sensuous reality, that thoughts are *only* thoughts, that is, that only sense perception gives filling and reality to them; that reason, in so far as it abides in and for itself, generates only mental figments. In this self-renunciation of reason, the concept of truth is lost, is restricted to the knowledge of mere subjective truth, of mere appearances, of only something to which the nature of the **21.30** fact does not correspond; *knowledge* has lapsed into *opinion*.

Yet there is something deeper lying at the foundation of this turn which knowledge takes, and appears as a loss and a retrograde step, something on which the elevation of reason to the loftier spirit of modern philosophy

in fact rests. The basis of that conception now universally accepted[8] is to be sought, namely, in the insight into the *necessary conflict* of the determinations of the understanding with themselves. – The reflection already mentioned consists in *transcending* the concrete immediate, in *determining* and *parting* it. But this reflection must *equally transcend* its *separating* determinations and above all *connect* them. The conflict of determinations breaks out precisely at the point of connection. This reflective activity of connection belongs in itself to reason, and to rise above the determinations and attain insight into their discord is the great negative step on the way to the true concept of reason. But, when not carried through, this insight runs into the misconception that reason is the one that contradicts itself; it fails to see that the contradiction is in fact the elevation of reason above the restrictions of the understanding and the dissolution of them. At that point, instead of making the final step that would take it to the summit, knowledge flees from the unsatisfactoriness of the determinations of the understanding to sensuous existence, believing that there it will find stability and accord. On the other hand, since this cognition is self-admittedly a cognition only of appearances, the unsatisfactoriness of the latter is admitted but at the same time presupposed: as much as to say that although we do not have cognition of things in themselves, nevertheless, within the sphere of appearance we do have correct cognition; as if, so to speak, there were a difference only in the *kind of subject matters* and one kind, namely the things in themselves, does not fall within the scope of knowledge whereas the other kind, namely the appearances, does.[9] This is like attributing right insight to someone, with the stipulation, however, that he is not fit to see what is true but only what is false. Absurd as this might be, no less absurd would be a cognition which is true but does not know its subject matter as it is in itself.

The *critique of the forms of the understanding*[10] has arrived precisely at this result, namely that such forms do *not apply to things in themselves*. – This can only mean that they are in themselves something untrue. However,
21.31 since they have been allowed to remain valid for reason and experience, the critique has not altered them in any way but rather has let them be for the subject in the same shape as they formerly applied to the object. But if they are inadequate for the thing in itself, still less must the understanding to which they supposedly belong have to put up with them and rest content with them. If they cannot be determinations of *the thing in itself*, still less

[8] i.e. the concept of truth as merely subjective.
[9] This is a criticism of Kant. Cf. Bxxv.
[10] The reference is to Kant. Cf. A276/B332ff.

can they be determinations of the *understanding*, to which one ought to concede at least the dignity of a thing. The determinations of finite and infinite run into the same conflict, whether they are applied to time and space, to the world, or are determinations internal to the spirit – just as black and white yield gray, whether they are mixed on a wall or on a palette. If our representation of the *world* is dissolved when we carry over to it the determinations of the infinite and finite, still more is *spirit* itself, which contains both determinations within itself, something inwardly self-contradictory, self-dissolving. – It is not the nature of the material or of the subject matter to which they are applied or in which they are found that can make a difference; for it is only through such determinations, and in accordance with them, that the subject matter has contradiction within it.

The said critique has therefore removed the forms of objective thinking only from the thing, but has left them in the subject as it originally found them. That is to say, it did not consider them in and for themselves, according to their proper content, but simply took them over from subjective logic in the manner of lemmas. There was no question, therefore, of an immanent deduction of such forms, or also of deducing them as logico-subjective forms, still less, of a dialectical treatment of them.

In its more consistent form, transcendental idealism did recognize the nothingness of the spectral *thing-in-itself*, this abstract shadow divorced from all content left over by critical philosophy, and its goal was to destroy it completely. This philosophy also made a start at letting reason produce its determinations from itself. But the subjective attitude assumed in the attempt prevented it from coming to fruition. This attitude and, together with it, the attempt and the cultivation of pure science were eventually abandoned.

But what is commonly understood by logic is considered with a total disregard of metaphysical significance. This science, in the state in which **21.32** it still finds itself, has admittedly no content of the kind which ordinary consciousness would accept as reality, or as a genuine fact. But it is not for that reason a formal science void of any material truth. Besides, the region of truth is not to be sought in that material missing in it – a lack to which the insufficiency of logic is usually attributed. More to the point is that the emptiness of the logical forms lies rather solely in the manner in which they are considered and dealt with. Scattered in fixed determinations and thus not held together in organic unity, they are dead forms and the spirit which is their vital concrete unity does not reside in them. Therefore they lack proper content – a matter that would in itself be substance. The content which is missed in the logical forms is nothing else than a fixed foundation

and a concretion of these abstract determinations, and such a substantial being is usually sought for them outside them. But logical reason is itself the substantial or real factor which, within itself, holds together all the abstract determinations and constitutes their proper, absolutely concrete, unity. There is no need, therefore, to look far and wide for what is usually called a matter; it is not the fault of the subject matter of logic if the latter seems empty but only of the manner in which this subject matter is grasped.

This reflection brings us to a statement of the standpoint from which logic is to be considered, of how this standpoint differs from previous treatments of this science and is alone the true base on which the science is to rest in the future.

In the *Phenomenology of Spirit*[11] I have presented consciousness as it progresses from the first immediate opposition of itself and the subject matter to absolute knowledge. This path traverses all the forms of the *relation of consciousness to the object* and its result is the *concept of science*. There is no need, therefore, to justify this concept here (apart from the fact that it emerges within logic itself). It has already been justified in the other work, and would indeed not be capable of any other justification than is produced by consciousness as all its shapes dissolve into that concept as into their truth. – A discursive justification or explanation of the concept of
21.33 science can yield at best a general notion of it and a historical acquaintance; but a definition of science – or more precisely of logic – has its *proof* only in the necessity of the manner it is produced by consciousness as just mentioned. Any definition with which a science makes an absolute beginning can contain nothing else than the precise and correct expression of what is represented in one's mind as the *traditionally accepted* subject matter and purpose of the science. That just this subject matter and this purpose are so represented is a historical warrant for invoking such or such fact as conceded, or, more precisely, only for pleading that such or such fact should be accepted as conceded. There will always be the possibility that someone else will adduce a case, an instance, in which something more and different must be understood by some term or other – a term which is therefore to be defined in a narrower or broader sense and the science, too, will have to be refashioned accordingly. – Further still, definition is always a matter of argumentation as to what is to be included in it or excluded from it, within which limits and to what extent; but argumentation is open

[11] i.e. in Hegel's final Jena work (1807). Hegel gives one summary of this process at the beginning of Chapter 8, the concluding chapter.

to the most manifold and various opinions, and on these a decision can finally be determined only arbitrarily. In this method of beginning science with a definition, no mention is made of the need to demonstrate the *necessity* of its *subject matter*, and hence the necessity of the science itself.

The concept of pure science and its deduction is therefore presupposed in the present work in so far as the *Phenomenology of Spirit* is nothing other than that deduction. Absolute knowledge is the *truth* of all the modes of consciousness because, as the course of the *Phenomenology* brought out, it is only in absolute knowledge that the separation of the *subject matter* from the *certainty of itself* is completely resolved: truth has become equal to certainty and this certainty to truth.

Pure science thus presupposes the liberation from the opposition of consciousness. It contains *thought in so far as this thought is equally the fact as it is in itself*; or the *fact in itself* in so far as this *is equally pure thought*. As *science*, truth is pure self-consciousness as it develops itself and has the shape of the self, so that *that which exists in and for itself is the conscious concept and the concept as such is that which exists in and for itself*. **21.34**

This objective thinking is thus the *content* of pure science. Consequently, far from being formal, far from lacking the matter required for an actual and true cognition, it is its content which alone has absolute truth, or, if one still wanted to make use of the word "matter," which alone is the veritable matter – a matter for which the form is nothing external, because this matter is rather pure thought and hence the absolute form itself. Accordingly, logic is to be understood as the system of pure reason, as the realm of pure thought. *This realm is truth unveiled, truth as it is in and for itself*. It can therefore be said that this content is *the exposition of God as he is in his eternal essence before the creation of nature and of a finite spirit*.

Anaxagoras is celebrated as the man who first gave voice to the thought that *Nous*, *thought*, is the principle of the world; that the essence of the world is to be defined as thought.[12] In this, he laid down the foundation for an intellectual view of the universe, the pure shape of which must be *logic*. Logic has nothing to do with a thought *about* something which stands outside by itself as the base of thought; nor does it have to do with forms meant to provide mere *markings* of the truth; rather, the necessary forms of thinking, and its specific determinations, are the content and the ultimate truth itself.

To get at least some inkling of this, one must put aside the notion that truth must be something tangible. Such tangibility, for example, is carried

[12] Cf. Aristotle, *Metaph.*, 984b.

over even into the ideas of Plato which are in God's thought, as if they were, so to speak, things that exist but in another world or region, and a world of actuality were to be found outside them which has a substantiality distinct from those ideas and is real only because of this distinctness. The Platonic idea is nothing else than the universal, or, more precisely, it is the concept of the subject matter; it is only in the concept that something has actuality, and to the extent that it is different from its concept, it ceases to be actual and is a nullity; the side of tangibility and of sensuous self-externality belongs to this null side. – But on the other side one can appeal to the representations typical of ordinary logic; for it is assumed that in definitions, for example, the determinations are not just of the knowing subject but are rather determinations of the subject matter, such that constitute its innermost essential nature. Or in an inference drawn from given determinations to others, the assumption is that the inferred is not something external to the
21.35 subject matter and alien to it, but that it belongs to it instead, that to the thought there corresponds being. – Everywhere presupposed by the use of the forms of the concept, of judgment, inference, definition, division, etc., is that they are not mere forms of self-conscious thinking but also of objective understanding. – *Thought* is an expression which attributes the determination contained in it primarily to consciousness. But inasmuch as it is said that *understanding*, *that reason*, *is in the objective world*, that spirit and nature have *universal laws* to which their life and their changes conform, then it is conceded just as much that the determinations of thought have objective value and concrete existence.

Critical philosophy did indeed already turn *metaphysics* into *logic* but, like the subsequent idealism, it gave to the logical determinations an essentially subjective significance out of fear of the object, as we said earlier;[13] for that reason, these determinations remained affected by the very object that they avoided, and were left with the remains of a thing-in-itself, an infinite check, as a beyond. But the liberation from the opposition of consciousness that science must be able to presuppose elevates the determinations of thought above this anxious, incomplete standpoint, and demands that they be considered for what they are in and for themselves without any such cautious restriction, as the logical, the purely rational.

Kant thought further of logic, that is, the aggregate of definitions and propositions that ordinarily passes for logic, as fortunate because, as contrasted with other sciences, it was its lot to attain an early completion; since Aristotle, it has taken no backward step, but also none forward, the latter

[13] Hegel is probably referring to 21.29, above.

because to all appearances it seems to be finished and complete. If logic has not undergone change since Aristotle – and in fact, judging from the latest compendiums of logic, the usual changes mostly consist only of omissions – then surely the conclusion to be drawn is that it is all the more in need of a total reworking; for the two thousand years of spirit's continuous labor must have procured for it a higher consciousness about its thinking and the purity of its inner essence. A comparison of the shapes to which the spirit of the practical and the religious world, and of science in every form of real or idealized consciousness, has raised itself, with the shape in which logic, spirit's consciousness of its own pure essence, finds itself, reveals too wide a difference that one would not be struck, **21.36** even on the most superficial observation, by the disproportion and the unworthiness of the latter consciousness as contrasted with spirit's other elevations.

As a matter of fact, the need for a reformation of logic has long been felt. In the form and content in which it is found in the textbooks, it must be said that it has fallen into disrepute. It is still being dragged along, more from a feeling that one cannot dispense with a logic altogether and the persisting traditional belief in its importance, than from any conviction that such a commonplace content and the occupation with such empty forms are of any value or use.

The additions of psychological, pedagogical, and even physiological material which logic was at one time given, have later been almost universally recognized as disfigurations. A large part of these psychological, pedagogical, or physiological observations, of these laws and rules, whether they occur in logic or anywhere else, must appear in and for themselves to be quite shallow and trivial. The rule, for instance, that one should think through and personally test what one reads in books or hears by word of mouth; or, if one has poor sight, that one should aid the eyes with spectacles – rules which were offered for the attainment of truth in the textbooks of so-called applied logic, and even pompously set out in paragraphs – these must immediately strike everyone as superfluous – apart from the writer or the teacher who is in the embarrassing position of having to pad with extra material the otherwise too short and lifeless content of logic.[c,14]

[c] A just published and most up-to-date adaptation of this science, Fries's *System of Logic* [1811, Introduction §1] goes back to its anthropological foundations. The shallowness of the representation or opinion on which it is based, in and of itself, and of the execution, dispenses me from the trouble of taking any notice of this insignificant publication.

[14] Note in the first edition, dropped in the second.

Regarding this content, the reason why it is so spiritless has already been given above. Its determinations are accepted in their undisturbed fixity and are brought together only in external connection. Since in judgments and syllogisms the operations are mostly reduced to, and founded upon, the quantitative aspect of the determinations, everything rests on external differentiation, on mere comparison, and becomes a completely analytical procedure and a calculus void of concept. The deduction of the so-called rules and laws, of inference especially, is no better than the manipulation of rods of unequal lengths for sorting them out in groups according to size – than a children's game of fitting together the pieces of a colored picture puzzle. – Not incorrectly, therefore, has this thinking been equated
21.37 with reckoning, and reckoning again with this thinking.[15] In mathematics, numbers have no conceptual content, no meaning outside equality or inequality, that is, outside relations which are entirely external; neither in themselves nor in connection are they a thought. When one mechanically calculates that three-fourths multiplied by two-thirds makes one-half, this operation contains about as much and as little thought as estimating whether in a logical figure this or that kind of syllogism applies.

For the dead bones of logic to be quickened by spirit and become substance and content, its *method* must be the one which alone can make it fit to be pure science. In the present situation of logic, hardly a trace of scientific method is to be seen in it. It has roughly the form of an empirical science. The empirical sciences did find a method of defining and classifying their material specifically suited, such as it is, to what they are supposed to be. Pure mathematics, too, has its method suited to its abstract objects and the quantitative form in which alone it considers them. In the Preface to the *Phenomenology of Spirit*, I have said what is essential regarding this method and, in general, the derived form of scientific procedure proper to mathematics,[16] but we shall return to it in more detail within the logic itself.[17] Spinoza, Wolff, and others, have let themselves be led astray into applying that method also to philosophy and in making the conceptually void external course of quantity, the course of the concept – a move contradictory in and for itself. Hitherto philosophy had yet to find its method but looked with envy at the systematic edifice of mathematics and,

[15] Hegel is referring to Reinhold, at the time when the latter had espoused the philosophy of C. G. Bardili. Reinhold defines thought as "*the determinable and, to this extent, finite repeatability of one and just this one in an other, through the indeterminable and, to this extent, infinite repeatability of one and just this one in one and just this one determining*." He calls this process a "*Rechnen*." K. L. Reinhold, "Was ist das Denken, als Denken?" in *Beyträge zur leichtern Übersicht der Philosophie beym Anfange des 19. Jahrhunderts* I (Hamburg: Perthes, 1801), p. 103.

[16] GW 9, 31–34. [17] GW 12, 226–229.

as we have said, borrowed it from it or helped itself with the method of sciences which are only an admixture of given material, propositions of experience and thoughts – or it even resorted to the crude rejection of all method. But the exposition of that which alone can be the true method of philosophical science falls within the treatment of logic itself; for method is the consciousness of the form of the inner self-movement of the content of logic. In the *Phenomenology of Spirit*, I have presented an example of this method with respect to a concrete object, namely *consciousness*.[d] At issue there are shapes of consciousness, each of which dissolves itself in being **21.38**
realized, has its own negation for result – and thereby has gone over to a higher shape. The one thing needed to *achieve scientific progress* – and it is essential to make an effort at gaining this quite *simple* insight into it – is the recognition of the logical principle that negation is equally positive, or that what is self-contradictory does not resolve itself into a nullity, into abstract nothingness, but essentially only into the negation of its *particular* content; or that such a negation is not just negation, but is *the negation of the determined fact* which is resolved, and is therefore determinate negation; that in the result there is therefore contained in essence that from which the result derives – a tautology indeed, since the result would otherwise be something immediate and not a result. Because the result, the negation, is a *determinate* negation, it has a *content*. It is a new concept but one higher and richer than the preceding – richer because it negates or opposes the preceding and therefore contains it, and it contains even more than that, for it is the unity of itself and its opposite. – It is above all in this way that the system of concepts is to be to erected – and it has to come to completion in an unstoppable and pure progression that admits of nothing extraneous.

How could I possibly pretend that the method that I follow in this system of logic, or rather the method that this system itself follows within, would not be capable of greater perfection, of greater elaboration of detail? Yet I know that it is the one and only true method. This is made obvious by the very fact that this method is not something distinct from its subject matter and content – for it is the content in itself, *the dialectic which it possesses within itself*, which moves the subject matter forward. It is clear that no expositions can be accepted as scientifically valid that do not follow the progression of this method and are not in tune with its simple rhythm, for it is the course of the fact itself.

[d] Later, with respect to other concrete objects and corresponding parts of philosophy.

In keeping with this method, I remind the reader that the divisions and the headings of the books, the sections and chapters given in this work, as well as the explanations associated with them, are made for the purpose of a preliminary overview, and that strictly speaking they only are of *historical* value. They do not belong to the content and body of the science but
21.39 are rather compilations of an external reflection which has already gone through the whole of the exposition, therefore knows the sequence of its moments in advance and anticipates them before they are brought on by the matter at issue itself.

Similarly in other sciences, preliminary definitions and divisions are by themselves nothing other than such external indications; but also within the science they never exceed this status. Even in logic, for example, we are told something like this, that "logic has two main parts, the doctrine of the elements and methodology," and under the doctrine of the elements we then immediately find such *headings* as "Laws of Thinking," followed by *Chapter One*, "On Concepts," *Section One*, "On the Clarity of Concepts," etc. – These definitions and divisions, made without any deduction and justification, constitute the systematic framework and the entire connectedness of such sciences. Such a logic considers it its vocation to talk about the necessity of deducing concepts and truths from principles; however, of what they call method, there is not the shadow of a deduction. Order consists in something like grouping together what is alike, in bringing in the simple ahead of the composite, and in other such external considerations. But as regards any internal, necessary connectedness, the list of headings is all that there is, and a transition is made simply by saying that now we are at "Chapter Two," or that "*we now come* to judgments," and the like.

Also the headings and divisions that appear in the present system are not intended to have for themselves any other significance than that of an indication of content. But then the *necessity* of the connectedness and the *immanent emergence* of distinctions must be found in the treatment of the fact itself, for it falls within the concept's own progressive determination.

What propels the concept onward is the already mentioned negative[18] which it possesses in itself; it is this that constitutes the truly dialectical factor. *Dialectic*, once considered a separate part of logic and, one may say, entirely misunderstood so far as its purpose and standpoint are concerned,
21.40 thereby assumes a totally different position. – Even the Platonic dialectic, in the *Parmenides* itself and elsewhere even more directly, on the one hand

[18] Cf. above, 21.28.

only has the aim of refuting limited assertions by internally dissolving them and, on the other hand, generally comes only to a negative result. Dialectic is commonly regarded as an external and negative activity which does not belong to the fact itself but is rooted in mere conceit, in a subjective obsession for subverting and bringing to naught everything firm and true, or at least as in resulting in nothing but the vanity of the subject matter subjected to dialectical treatment.

Kant had a higher regard for dialectic – and this is among his greatest merits – for he removed from it the semblance of arbitrariness which it has in ordinary thought and presented it as *a necessary operation of reason*.[19] Because dialectic was held to be merely the art of practicing deceptions and producing illusions, it was straight away assumed that it plays a false game; that its whole power rests solely on hiding its deception; that its results are only deviously obtained, a subjective shine. True, Kant's dialectical displays in the antinomies of pure reason, when examined more closely as will be done at length in the course of this work,[20] do not deserve great praise; but the general idea to which he gave justification and credence is the *objectivity of reflective shine* and the *necessity of the contradiction* which belongs to the *nature* of thought determinations: of course, this he did above all with reference to the way in which these determinations are applied by reason to *the things in themselves*; nevertheless, what such determinations are in reason, and with reference to what is in itself, this is precisely their nature. This result, *grasped* in *its positive aspect*, is nothing else but the *inner negativity* of the determinations which is their self-moving soul, the principle of all natural and spiritual life. But if one stays fixed at the abstract negative aspect of dialectics, the result is only the commonplace that reason is incapable of knowing the infinite – a peculiar result indeed, for it says that, since the infinite is what is rational, reason is not capable of cognizing the rational.

It is in this dialectic as understood here, and hence in grasping opposites in their unity, or the positive in the negative, that *the speculative* consists. **21.41**
It is the most important aspect of dialectic, but for the still unpracticed, unfree faculty of thought, the most difficult. Such a faculty, if still occupied with breaking itself free of the concrete representations of the senses and of ratiocination, must first practice abstract thinking, hold fast to concepts in their *determinateness* and learn to gain knowledge by means of them. An exposition of logic to this end would have, in its method, to keep to a subject division as mentioned above, and with regard to the more

[19] Cf. A321/B377ff. [20] Cf below, 21.179ff., 228ff.

detailed content, to the definitions given to the single concepts, without getting itself involved in dialectic. In external shape, it would turn out to be similar to the usual presentation of this science, yet would also depart from it in content and, though of no use for the practice of speculative thinking, it would however serve abstract thinking, and this is a purpose which can never be realized by a logic popularized with the additions of psychological and anthropological materials. What it would give to the mind is the picture of a methodically ordered whole, even though the soul of the edifice, the method dwelling in the dialectic, would not itself appear in it.

Finally, with respect to the *education and the relation of the individual to logic*, I would further remark that this science, like grammar, appears in two different aspects or values. It is one thing for one who comes to it and to the sciences generally for the first time, and something else for one who returns to it from these sciences. He who is beginning to make his acquaintance with grammar finds in its forms and laws dry abstractions, arbitrary rules, quite in general a disconnected aggregate of definitions that have no other value or meaning than what they immediately signify; at the start, there is nothing to be known in them except themselves. On the other hand, he who has mastered a language and is also acquainted with other languages with which to compare it, to such is given the capacity to feel in the grammar of the language the spirit and culture of a people; the same rules and forms now have an enriched, living value. In the medium of the language, he can recognize the expression of spirit as spirit, and this is logic. So, he who first comes to this science, at first finds in logic an isolated system of abstractions which, confined to itself, does not reach over to embrace other forms of cognition and of science. On the contrary, when held against the riches of the world-scenario, against the apparently real content of the other sciences; when compared with the promise of the absolute science to unveil the *essence* of these riches, to unveil the *inner nature* of spirit
21.42 and of the world, the *truth*, then in the abstractness of its shape, in the colorlessness and stark simplicity of its pure determinations; this science has rather the look of one who can sooner afford anything than any such promise but stands penniless before those riches. The first acquaintance with logic restricts its significance to it alone; its content passes only for an isolated occupation with thought determinations, *next* to which the other scientific endeavors constitute a material and content of their own, one over which logical thought may indeed have some formal influence, but an influence which is more of their own making and which, if need be, scientific form and the study of this form can at any rate also dispense with.

The other sciences have on the whole discarded the well-regulated method of proceeding by way of definitions, axioms, theorems and their proofs, and so on; so-called natural logic has become their accepted norm and this manages to do its work without any specialized knowledge of thought itself. All in all, the matter and the content of these sciences stand totally independent of logic and are also better suited to the senses, to feeling, the imagination, and any kind of practical interest.

So logic must indeed at first be learned as something which one may well understand and penetrate into but in which, at the beginning, one misses the scope, depth, and broader significance. Only after a more profound acquaintance with the other sciences does logic rise for subjective spirit from a merely abstract universal to a universal that encompasses within itself the riches of the particular: in the same way a moral maxim does not possess in the mouth of a youngster who otherwise understands it quite well the meaning and scope that it has in the spirit of a man with a lifetime of experience, to whom therefore the weight of its content is expressed in full force. Thus logic receives full appreciation of its value only when it comes as the result of the experience of the sciences; then it displays itself to spirit as the universal truth, not as a *particular* cognition *alongside* another material and other realities, but as the essence rather of this further content.

Now although this power of logic is not consciously present to spirit at the beginning of its study, such a study will nevertheless impart to it the inward power which will lead it to the truth. The system of logic is the realm of shadows, the world of simple essentialities, freed of all sensuous concretion. To study this science, to dwell and to labor in this realm of shadows, is the absolute culture and discipline of consciousness. Its task is one which is remote from the intuitions and the goals of the senses, **21.43** remote from feelings and from the world of merely fancied representation. Considered from its negative side, this task consists in holding off the accidentality of ratiocinative thought and the arbitrariness in the choice to accept one ground as valid rather than its opposite.

But above all, thought thereby gains self-subsistence and independence. It will make itself at home in abstractions and in the ways of working with concepts without sensuous substrata, will develop an unconscious power to assimilate in rational form the otherwise dispersed manifold of cognitions and sciences, the power to grasp and hold them in their essentiality, to strip them of every externality and in this way to abstract from them the logical element – or what is the same thing, the power to fill the abstract groundwork of logic previously acquired through study with the content of

every truth, and to bestow upon this content the value of a universal which no longer stands as a particular alongside other particulars but embraces
21.44 them all in its grasp and is their essence, the absolutely true.

GENERAL DIVISION OF THE LOGIC

It follows from what has been said regarding the *concept* of this science and where its justification lies that the general *division* of it can be only *provisional* here – can be given, as it were, only in so far as the author is already acquainted with the science and is consequently *historically* in a position to indicate in advance the main distinctions in which the concept assumes determination as it develops.

Still, the attempt can be made to elicit in advance some general understanding of what is required for *performing the division*, although even here recourse must be made to a procedural method which will attain full disclosure and justification only within the science. – One must thus be reminded, first and foremost, that presupposed here is that the *division* must be connected with the concept, or rather must lie in the concept itself. The concept is not indeterminate but is *determinate within*; the division, however, expresses this *determinateness* of the concept *in developed form*; it is the *parting* of the concept *in judgment*,[21] not a judgment *about* some subject matter or other picked out externally, but the judging, that is, the *determining*, of the concept within it. Right-angularity, acute-angularity, etc., or equilaterality, which are the determinations according to which triangles are divided, do not lie in the determinateness of the triangle itself, that is, not in what is usually called the concept of a triangle, no more than in the concept of animal in general, or of mammal, bird, etc., one can find the determinations according to which animal in general is divided into mammal, bird, etc., and these classes are then divided into further genera. Such determinations are taken from elsewhere, from empirical intuition; they come to those so-called concepts from without. In the philosophical treatment of division, the concept must show that it itself holds the source of the determinations.

21.45 But in the Introduction, the concept of logic was itself presented as the result of a science that transcends it, and hence as equally a *presupposition* here. Accordingly, logic was defined as the science of pure thought – the science that has *pure knowledge* for its principle and is a unity which is not

[21] *parting . . . in judgment* = *Urteil*. The German *Urteil* ("judgment") connotes a "parting," like the Greek κρίστς.

abstract but living and concrete, so that the opposition of consciousness between *a being subjectively existing for itself*, and another but objectively *existing such being*, has been overcome in it, and being is known to be in itself a pure concept and the pure concept to be true being. These, then, are the two *moments* contained in logic. But they are now known to exist *inseparably*, not as in consciousness, where each *exists for itself*; it is for this reason and this reason alone, because they are at the same time known to be *distinct* (yet not to exist for themselves), that their unity is not abstract, dead and inert, but concrete.

This unity also constitutes the logical principle as *element*,[22] so that the development of the distinction which is from the start present in it proceeds only *inside* this element. For since the division is, as we said, the *parting* or the *judgment* of the concept – is the positing of the determination which is already immanent in it and therefore the positing of its distinction – this positing must not be understood as resolving that concrete unity back into its determinations, as if these were to exist on their own, for this would be here a vacuous return to the previous standpoint, to the opposition of consciousness. But this opposition has vanished; the unity remains the element, and the distinctions of the division and of the development in general no longer transgress that unity. Therefore the earlier determinations which (on the *pathway to truth*) *existed for themselves*, as for instance that of subjective and objective, or also of thought and being, of concept and reality, no matter from what standpoint they were determined, are *now in their truth*, that is, in their unity, *reduced to forms*. In their difference they therefore implicitly remain, *in themselves*, the whole concept, and this concept is posited in the division only under its own determinations.

Thus it is the whole concept which we must consider, first as *existent* concept, and then *as concept*; in the one case it is concept only *implicitly*, *in itself*, the concept of reality or being; in the other, it is the concept as such, the *concept that exists for itself* (in more concrete forms, the concept as it is in the human being, who is endowed with thought, and also in the sentient animal and in general in organic individuality, although, of course, in these last it is not *conscious* and still less *known*; it is concept *in itself* only in inorganic nature). – Accordingly, the first division must be between the logic of the *concept* as *being* and of the concept *as concept*, or **21.46** (if we want to avail ourselves of otherwise familiar, but very indeterminate and therefore very ambiguous expressions) in *objective* and *subjective* logic.

[22] "Element" has classical connotations here. Like "water," "fire," or "air," this unity is a pervasive element that embraces differences.

However, in accordance with the elemental unity which is immanent in the concept as basis, and hence in accordance with the inseparability of the concept's determinations, such determinations, even as *differentiated* (the concept is posited in their *difference*), must also stand at least in *reference* to each another. There results a sphere of *mediation*, the concept as a system of *reflected determinations*, that is, of being as it passes over into the initselfness of the concept – a concept which is in this way not yet posited for itself *as such* but is also fettered by an immediate being still external to it. This sphere is *the doctrine of essence* that stands between the doctrine of being and of the concept. – In the general division of logic in this work, it has been included in *objective logic* because, although essence is indeed already inwardness, the character of *subject* is to be reserved *nominatim* for the concept.

Recently Kant[e] has opposed to what has usually been called "logic"
21.47 another, namely a *transcendental logic*.[24] What has been called *objective logic* here would correspond in part to what for him is *transcendental logic*. Kant distinguishes it from what he calls general logic because (α) it deals with concepts that refer to *intended objects a priori*, and hence does not abstract from all the *content* of objective cognition, or in that it contains the rules of the pure thinking of an *intended object*; and because (β) it thereby goes to the source of our cognition so far as this cognition cannot be attributed to the intended objects. – It is to this second aspect that Kant's philosophical interest is exclusively directed. His principal idea is to vindicate the *categories* for self-consciousness understood as the

[e] I should point out that in this work I make frequent references to the Kantian philosophy (which to many might seem superfluous) because, whatever might be said here or elsewhere of its distinctive character or of particular parts of its exposition, it constitutes the foundation and the starting point of the new German philosophy, and this is a merit of which it can boast undiminished by whatever fault may be found in it. An added reason for these frequent references in the objective logic is that Kantian philosophy delves deeply into important, *more specific* aspects of the logic, whereas later philosophical expositions have paid little attention to these aspects and in some instances have even expressed crude – though not unavenged – contempt for them. The philosophizing most widespread among us does *not reach* past the Kantian results that reason cannot cognize any true content, and that, when it comes to absolute truth, it must be directed to faith.[23] But what for Kant is the result is for this philosophizing the immediate starting point, so that the exposition which precedes the result, from which this result is derived and which constitutes philosophical cognition, is excised beforehand. The philosophy of Kant thus serves as a cushion for an intellectual indolence which takes comfort in the fact that everything is already proved and settled. For cognition and a specific content of thought which is not found in such a barren and arid complacency, one must therefore turn to that preceding exposition.

[23] The allusion here is at least to Friedrich Heinrich Jacobi. Cf. Jacobi, *David Hume über den Glauben, oder Idealismus und Realismus, Ein Gespräch* (Breslau, 1787), pp. 48–49; *Werke: Gesamtausgabe*, Series 2, Vol. 1, pp. 31–32. English trans., *David Hume on Faith, or Idealism and Realism: A Dialogue*, in *Main Philosophical Works*, pp. 271–272.

[24] A50/B74ff.

subjective "I."[25] Because of this determination, his point of view remains confined within consciousness and its opposition, and, besides the empirical element of feeling and intuition, is left with something else not posited or determined by thinking self-consciousness, a *thing-in-itself*, something alien and external to thinking – although it is easy to see that such an abstract entity as the *thing-in-itself* is itself only the product of thought, and of merely abstractive thought at that. – If other Kantians[26] have expanded on the determining of the *intended object* by the "I" by saying that the objectifying of the "I" is to be regarded as an original and necessary deed of consciousness, so that in this original deed there is not yet the representation of the "I" – which would be only a consciousness of that consciousness, or itself an objectifying of that consciousness – then this objectifying deed, liberated from the opposition of consciousness, is closer to what may be taken simply as *thinking* as such.[f] But this deed should no longer be called consciousness; for consciousness holds within itself the **21.48** opposition of the "I" and its intended object which is not to be found in that original deed.[27] The name "consciousness" gives it more of a semblance of subjectivity than does the term "*thought*," which here, however, is to be taken in the absolute sense of *infinite thought*, not as encumbered by the finitude of consciousness; in short, *thought as such*.

Now because the interest of the Kantian philosophy was directed to the so-called *transcendental* nature of the categories, the treatment itself of such categories came up empty. What they are in themselves apart from their abstract relation to the "I," a relation which is the same for all, how they are determined and related to each other, this was not made a subject of consideration, and therefore knowledge of their nature was not in the least advanced by this philosophy. What alone is of interest in this connection comes only in the Critique of Ideas. – However, if there was to be a real progress in philosophy, it was necessary that the interest of

[f] If the expression, the "*objectifying* deed of the 'I'," brings to mind other products of spirit, e.g. those of *fantasy*, it is to be observed that we are speaking of the determining of an intended object inasmuch as the elements of its content do *not* belong to *feeling* and *intuition*. The intended object is here a *thought*, and to determine it means both to produce it originally, and also, inasmuch as it is something presupposed, to have further thoughts about it, to develop it further by thinking.

[25] Cf., among other places, the B edition of the *Critique of Pure Reason*, §§25, 26.

[26] The most obvious allusion is to J. G. Fichte. For a clear statement of Fichte's still early position on the matter, see his *Zweite Einleitung in die Wissenschaftslehre*, *Philosophisches Journal*, 6 (1797) §5; English trans., *Second Introduction to the Wissenschaftslehre*, trans. and ed. Daniel Breazeale (Indianapolis: Hackett, 1994), pp. 46ff.; GA I.4.463.

[27] Fichte was aware of this. Cf.: "I become conscious only of the concepts involved, that is, the concept of the object and the concept of the goal, not however of the two intuitions [i.e. intellectual intuition and intuition of the senses] that lie at the basis of these concepts." Fichte, *Second Introduction to the Wissenschaftslehre*, p. 47; GA I.4, 467.

thought should be drawn to the consideration of the formal side, of the "I," of consciousness as such, that is, of the abstract reference of a subjective awareness to an object, and that in this way the path should be opened for the cognition of the *infinite form*, that is, of the concept. Yet, in order to arrive at this cognition, the finite determinateness in which that form is as "I," as consciousness, must be shed. The form, when thought out in its purity, will then have within itself the capacity to *determine* itself, that is, to give itself a content, and to give it as a necessary content – as a system of thought-determinations.

The objective logic thus takes the place rather of the former *metaphysics* which was supposed to be the scientific edifice of the world as constructed by *thoughts* alone. – If we look at the final shape in the elaboration of this science, then it is *ontology* which objective logic most directly replaces in the first instance, that is, that part of metaphysics intended to investigate the nature of *ens* in general[28] (and *ens* comprises within itself both *being* and
21.49 *essence*, a distinction for which the German language has fortunately preserved different expressions). – But objective logic comprises within itself also the rest of metaphysics, the metaphysics which sought to comprehend with the pure forms of thought such particular substrata, originally drawn from the imagination,[29] as the soul, the world, and God, and in this type of consideration the *determinations of thought* constituted the *essential factor*. Logic, however, considers these forms free of those substrata, which are the subjects *of figurative representation*, considers their nature and value in and for themselves. That metaphysics neglected to do this, and it therefore incurred the just reproach that it employed the pure forms of thought *uncritically*, without previously investigating whether and how they could be the determinations of the thing-in-itself, to use Kant's expression – or more precisely, of the rational. – The objective logic is therefore the true critique of such determinations – a critique that considers them, not according to the abstract form of the *a priori* as contrasted with the *a posteriori*, but in themselves according to their particular content.

The subjective logic is the logic of the *concept* – of essence which has sublated its reference to a being or to its reflective shine, and in its determination is no longer external but something subjective, freely self-subsisting, self-determining, or rather the *subject* itself. – Since *subjective* brings with it the misconception of "accidental" and "arbitrary" and also, in general,

[28] Cf.: "Ontology or first philosophy is the science of being in general or being as such." Christian Wolff, *Philosophia prima, sive ontologia, methodo scientifica pertractata* (Frankfurt & Leipzig, 1736), §1.

[29] *Vorstellen*.

of determinations that belong to the form of *consciousness*, no particular weight is to be attached here to the distinction of subjective and objective. This is a distinction which will be more precisely developed later in the logic itself.

Logic thus divides overall into *objective* and *subjective* logic, but more specifically it has three parts:

I. The Logic of Being,
II. The Logic of Essence, and
III. The Logic of the Concept.

BOOK ONE

The Doctrine of Being

21.51

21.53

WITH WHAT MUST THE BEGINNING OF SCIENCE BE MADE?

It is only in recent times that there has been a new awareness of the difficulty of finding a *beginning* in philosophy, and the reason for this difficulty, and so also the possibility of resolving it, have been discussed in a variety of ways. The beginning of philosophy must be either *something mediated* or *something immediate*, and it is easy to show that it can be neither the one nor the other; so either way of beginning runs into contradiction.[1]

The *principle* of a philosophy also expresses a beginning, of course, but not so much a subjective as an *objective* one, the beginning of *all things*. The principle is a somehow determinate *content* – "water," "the one," "nous," "idea," or "substance," "monad," etc. – or, if it designates the nature of cognition and is therefore meant simply as a criterion rather than an objective determination, as "thinking," "intuition," "sensation," "I," even "subjectivity," then here too the interest still lies in the content determination. The beginning as such, on the other hand, as something subjective in the sense that it is an accidental way of introducing the exposition, is left unconsidered, a matter of indifference, and consequently also the need to ask with what a beginning should be made remains of no importance in face of the need for the principle in which alone the interest of *the fact* seems to lie, the interest as to what is the *truth*, the *absolute ground* of everything.

But the modern perplexity about a beginning proceeds from a further need which escapes those who are either busy demonstrating their principle dogmatically or skeptically looking for a subjective criterion against dogmatic philosophizing, and is outright denied by those who begin, like a shot from a pistol, from their inner revelation, from faith, intellectual

[1] There is an allusion here to Fichte. Cf. *Grundlage der gesammten Wissenschaftslehre* (1794), English trans., *The Science of Knowledge*, Peter Heath and John Lachs (Cambridge: Cambridge University Press, 1982), pp. 93ff. GA, I.2, 255ff.

intuition, etc. and who would be exempt from *method* and *logic*.[2] If earlier abstract thought is at first interested only in the principle as *content*, but
21.54 is driven as philosophical culture advances to the other side to pay attention to the conduct of the *cognitive process*, then the *subjective* activity has also been grasped as an essential moment of objective truth, and with this there comes the need to unite the method with the content, the *form* with the *principle*. Thus the *principle* ought to be also the beginning, and that *which has priority* for thinking ought to be also the *first* in the process of thinking.

Here we only have to consider how the *logical* beginning appears. The two sides from which it can be taken have already been named, namely either by way of mediation as result, or immediately as beginning proper. This is not the place to discuss the question apparently so important to present-day culture, whether the knowledge of truth is an immediate awareness that begins absolutely, a faith, or rather a mediated knowledge. In so far as the issue allows *passing* treatment, this has already been done elsewhere (in my *Encyclopedia of the Philosophical Sciences*, 3rd edn, in the Prefatory Concept, §§21ff.). Here we may quote from it only this, that *there is* nothing in heaven or nature or spirit or anywhere else that does not contain just as much immediacy as mediation, so that both these determinations prove to be *unseparated* and *inseparable* and the opposition between them nothing real. As for a *scientific discussion*, a case in point is every logical proposition in which we find the determinations of immediacy and mediacy and where there is also entailed, therefore, a discussion of their opposition and their truth. This opposition, when connected to thinking, to knowledge, to cognition, assumes the more concrete shape of immediate or mediated *knowledge*, and it is then up to the science of logic to consider the nature of cognition in general, while the more concrete forms of the same cognition fall within the scope of the science of spirit and the phenomenology of spirit. But to want to clarify the nature of cognition *prior* to science is to demand that it should be discussed *outside* science, and *outside* science this cannot be done, at least not in the scientific manner which alone is the issue here.

A beginning is *logical* in that it is to be made in the element of a free, self-contained thought, *in pure knowledge*; it is thereby *mediated*, for pure knowledge is the ultimate and absolute truth of *consciousness*. We said in the Introduction that the *Phenomenology of Spirit* is the science of consciousness, its exposition; that consciousness has the *concept* of science,

[2] The allusion here is most likely to Jacobi. Cf. also the Preface to the *Phenomenology*, GW 9, 24.10–12.

that is, pure knowledge, for its result.[3] To this extent, logic has for its presupposition the science of spirit in its appearance, a science which contains the necessity, and therefore demonstrates the truth, of the stand- **21.55**
point which is pure knowledge and of its mediation. In this science of spirit in its appearance the beginning is made from empirical, *sensuous* consciousness, and it is this consciousness which is *immediate* knowledge in the strict sense; there, in this science, is where its nature is discussed. Any other consciousness, such as faith in divine truths, inner experience, knowledge through inner revelation, etc., proves upon cursory reflection to be very ill-suited as an instance of immediate knowledge. In the said treatise, immediate consciousness is also that which in the science comes first and immediately and is therefore a presupposition; but in logic the presupposition is what has proved itself to be the result of that preceding consideration, namely the idea as pure knowledge. *Logic* is the *pure science*, that is, pure knowledge in the full compass of its development. But in that result the idea has the determination of a certainty that has become truth; it is a certainty which, on the one hand, no longer stands over and against a subject matter confronting it externally but has interiorized it, is knowingly aware that the subject matter is itself; and, on the other hand, has relinquished any knowledge of itself that would oppose it to objectivity and would reduce the latter to a nothing; it has externalized this subjectivity and is at one with its externalization.

Now starting with this determination of pure knowledge, all that we have to do to ensure that the beginning will remain immanent to the science of this knowledge is to consider, or rather, setting aside every reflection, simply to take up, *what is there before us*.

Pure knowledge, thus *withdrawn* into this *unity*, has sublated every reference to an other and to mediation; it is without distinctions and as thus distinctionless it ceases to be knowledge; what we have before us is only *simple immediacy*.

Simple immediacy is itself an expression of reflection; it refers to the distinction from what is mediated. The true expression of this simple immediacy is therefore *pure being*. Just as *pure* knowledge should mean nothing but knowledge as such, so also pure being should mean nothing but *being* in general; *being*, and nothing else, without further determination **21.56**
and filling.

Being is what makes the beginning here; it is presented indeed as originating through mediation, but a mediation which at the same time sublates

[3] Cf above, 21.32.

itself, and the presupposition is of a pure knowledge which is the result of finite knowledge, of consciousness. But if no presupposition is to be made, if the beginning is itself to be taken *immediately*, then the only determination of this beginning is that it is to be the beginning of logic, of thought as such. There is only present the resolve, which can also be viewed as arbitrary, of considering *thinking as such*. The beginning must then be *absolute* or, what means the same here, must be an abstract beginning; and so there is *nothing* that it may *presuppose*, must not be mediated by anything or have a ground, ought to be rather itself the ground of the entire science. It must therefore be simply *an* immediacy, or rather only *immediacy* itself. Just as it cannot have any determination with respect to an other, so too it cannot have any within; it cannot have any content, for any content would entail distinction and the reference of distinct moments to each other, and hence a mediation. The beginning is therefore *pure being*.

After this simple exposition of what alone first belongs to this simplest of all simples, the logical beginning, we may add the following further reflections which should not serve, however, as elucidation and confirmation of the exposition – this is complete by itself – but are rather occasioned by notions and reflections which may come our way beforehand and yet, like all other prejudices that antedate the science of logic, must be disposed of within the science itself and are therefore to be patiently deferred until then.

The insight that absolute truth must be a result, and conversely, that a result presupposes a first truth which, because it is first, objectively considered is not necessary and from the subjective side is not known – this insight has recently given rise to the thought that philosophy can begin only
21.57 with something which is *hypothetically* and *problematically* true, and that at first, therefore, philosophizing can be only a quest. This is a view that Reinhold has repeatedly urged in the later stages of his philosophizing,[4] and which must be given credit for being motivated by a genuine interest in the speculative nature of philosophical *beginning*. A critical examination of this view will also be an occasion for introducing a preliminary understanding of what progression in logic generally means, for the view has direct implications for the nature of this advance. Indeed, as portrayed by it, progression in philosophy would be rather a retrogression and a grounding, only by virtue of which it then follows as result that that, with which the beginning was made, was not just an arbitrary assumption but was in fact *the truth*, and *the first truth* at that.

[4] Reinhold, *Beyträge* I (1801), p. 101.

It must be admitted that it is an essential consideration – one which will be found elaborated again within the logic itself – that *progression* is a retreat to the *ground*, to the *origin* and the *truth* on which that with which the beginning was made, and from which it is in fact produced, depends. – Thus consciousness, on its forward path from the immediacy with which it began, is led back to the absolute knowledge which is its innermost *truth*. This truth, the ground, is then also that from which the original first proceeds, the same first which at the beginning came on the scene as something immediate. – It is most of all in this way that absolute spirit (which is revealed as the concrete and supreme truth of all being) comes to be known, as at the *end* of the development it freely externalizes itself, letting itself go into the shape of an *immediate* being – resolving itself into the creation of a world which contains all that fell within the development preceding that result and which, through this reversal of position with its beginning, is converted into something dependent on the result as principle. Essential to science is not so much that a pure immediacy should be the beginning, but that the whole of science is in itself a circle in which the first becomes also the last, and the last also the first.

Conversely, it follows that it is just as necessary to consider as *result* that into which the movement returns as to its *ground*. In this respect, the first **21.58**
is just as much the ground, and the last a derivative; since the movement makes its start from the first and by correct inferences arrives at the last as the ground, this last is result. Further, the *advance* from that which constitutes the beginning is to be considered only as one more determination of the same advance, so that this beginning remains as the underlying ground of all that follows without vanishing from it. The advance does not consist in the derivation of an *other*, or in the transition to a truly other: inasmuch as there is a transition, it is equally sublated again. Thus the beginning of philosophy is the ever present and self-preserving foundation of all subsequent developments, remaining everywhere immanent in its further determinations.

In this advance the beginning thus loses the one-sidedness that it has when determined simply as something immediate and abstract; it becomes mediated, and the line of scientific forward movement consequently turns *into a circle*. – It also follows that what constitutes the beginning, because it is something still undeveloped and empty of content, is not yet truly known at that beginning, and that only science, and science fully developed, is the completed cognition of it, replete with content and finally truly grounded.

But for this reason, because it is as absolute ground that the *result* finally emerges, the progression of this cognition is not anything provisory, still

problematic and hypothetical, but must be determined through the nature of the matter at issue and of the content itself. Nor is the said beginning an arbitrary and only temporary assumption,[5] or something which seems to be an arbitrary and tentative presupposition but of which it is subsequently shown that to make it the starting point was indeed the right thing to do; this is not as when we are instructed to make certain constructions in order to aid the proof of a geometrical theorem, and only in retrospect, in the course of the proof, does it become apparent that we did well to draw precisely these lines and then, in the proof itself, to begin by comparing
21.59 them or the enclosed angles – though the line-drawing or the comparing themselves escape conceptual comprehension.

So we have just given, right within science itself, the *reason* why in pure science the beginning is made with pure being. This pure being is the unity into which pure knowledge returns, or if this knowledge, as form, is itself still to be kept distinct from its unity, then pure being is also its content. It is in this respect that this *pure being*, this absolute immediate, is just as absolutely mediated. However, *just because* it is here as the beginning, it is just as essential that it should be taken in the one-sidedness of being purely immediate. If it were not this pure indeterminacy, if it were determined, it would be taken as something mediated, would already be carried further than itself: a determinate something has the character of an *other with respect to* a first. It thus lies in the *nature of a beginning itself* that it should be being and nothing else. There is no need, therefore, of other preparations to enter philosophy, no need of further reflections or access points.

Nor can we derive a *more specific determination* or a *more positive* content for the beginning of philosophy from the fact that it is such a beginning.[6] For here, at the beginning, where the fact itself is not yet at hand, philosophy is an empty word, a received and yet unjustified notion. Pure knowledge yields only this negative determination, namely that the beginning ought to be *abstract*. If pure being is taken as the *content* of pure knowledge, then the latter must step back from its content, allowing it free play and without determining it further. – Or again, inasmuch as pure being is to be considered as the unity into which knowledge has collapsed when at the highest point of union with its objectification, knowledge has then disappeared into this unity, leaving behind no distinction from it and hence no determination for it. – Nor is there anything else present, any content whatever, that could be used to make a more determinate beginning with it.

[5] i.e. as Reinhold thought. [6] The allusion is still to Reinhold.

But, it may be said, the determination *of being* assumed so far as the beginning can also be let go, so that the only requirement would be that a **21.60** pure beginning should be made. Nothing would then be at hand except the *beginning* itself, and we must see what this would be. – This position could be suggested also for the benefit of those who are either not comfortable, for whatever reason, with beginning with being and even less with the transition into nothing that follows from being, or who simply do not know how else to make a beginning in a science except by *presupposing* a *representation* which is subsequently *analyzed*, the result of the analysis then yielding the first determinate concept in the science. If we also want to test this strategy, we must relinquish every particular object that we may intend, since the beginning, as the beginning of *thought*, is meant to be entirely abstract, entirely general, all form with no content; we must have nothing, therefore, except the representation of a mere beginning as such. We have, therefore, only to see what there is in this representation.

As yet there is nothing, and something is supposed to become. The beginning is not pure nothing but a nothing, rather, from which something is to proceed; also being, therefore, is already contained in the beginning. Therefore, the beginning contains both, being and nothing; it is the unity of being and nothing, or is non-being which is at the same time being, and being which is at the same time non-being.

Further, being and nothing are present in the beginning as *distinguished*; for the beginning points to something other – it is a non-being which refers to an other; that which begins, as yet *is* not; it only reaches out to being. The being contained in the beginning is such, therefore, that it distances itself from non-being or sublates it as something which is opposed to it.

But further, that which begins already *is*, but *is* also just as much *not* yet. The opposites, being and non-being, are therefore in immediate union in it; or the beginning is their *undifferentiated unity*.

An analysis of the beginning would thus yield the concept of the unity of being and non-being – or, in a more reflected form, the concept of the unity of differentiated and undifferentiated being – or of the identity of identity and non-identity.[7] This concept could be regarded as the first, purest, that is, most abstract, definition of the absolute – as it would indeed be if the issue were just the form of definitions and the name of the absolute. In this sense, just as such an abstract concept would be the first definition of the **21.61** absolute, so all further determinations and developments would be only

[7] This is Hegel's earliest formulation of his position. Cf. *The Difference Between Fichte's and Schelling's System of Philosophy* (1801), p. 156. GW 4, 6.23.7–21.

more determinate and richer definitions of it. But let those who are not satisfied with *being* as the beginning, since being passes over into nothing and what emerges is the unity of the two – let them consider what is more likely to satisfy them: this beginning that begins with the representation of the *beginning* and an analysis of it (an analysis that is indeed correct yet equally leads to the unity of being and non-being) or a beginning which makes being the beginning.

But, regarding this strategy, there is still a further observation to be made. The said analysis presupposes that the representation of the beginning is known; its strategy follows the example of other sciences. These presuppose their object and presume that everyone has the same representation of it and will find in it roughly the same determinations which they have collected here or there, through analysis, comparison, and sundry argumentation, and they then offer as its representations. But that which constitutes the absolute beginning must likewise be something otherwise known; now, if it is something concrete and hence in itself variously determined, then this *connectedness* which it is in *itself* is presupposed as a known; the connectedness is thereby adduced as something *immediate*, *which however it is not*; for it is connectedness only as a connection of distinct elements and therefore contains *mediation* within itself. Further, the accidentality and the arbitrariness of the analysis and the specific mode of determination affect the concrete internally. Which determinations are elicited depends on what each individual *happens to discover* in his immediate accidental representation. The connection contained within a concrete something, within a synthetic unity, is *necessary* only in so far as it is not found already given but is produced rather by the spontaneous return of the moments
21.62 back into this unity, a movement which is the opposite of the analytical procedure that occurs rather within the subject and is external to the fact itself.

Here we then have the precise reason why that with which the beginning is to be made cannot be anything concrete, anything containing a connection *within its self*. It is because, as such, it would presuppose within itself a process of mediation and the transition from a first to an other, of which process the concrete something, now become a simple, would be the result. But the beginning ought not itself to be already a first *and* an other, for anything which is in itself a first *and* an other implies that an advance has already been made. Consequently, that which constitutes the beginning, the beginning itself, is to be taken as something unanalyzable, taken in its simple, unfilled immediacy; and therefore *as being*, as complete emptiness.

If, impatient with this talk of an abstract beginning, one should say that the beginning is to be made, not with the beginning, but directly with the *fact* itself, well then, this subject matter is nothing else than that empty being. For what this subject matter is, that is precisely what ought to result only in the course of the science, what the latter cannot presuppose to know in advance.

On any other form otherwise assumed in an effort to have a beginning other than empty being, that beginning would still suffer from the same defects. Let those who are still dissatisfied with this beginning take upon themselves the challenge of beginning in some other way and yet avoiding such defects.

But we cannot leave entirely unmentioned a more original beginning to philosophy which has recently gained notoriety, the beginning with the "I."[8] It derived from both the reflection that all that follows from the first truth must be deduced from it, and the need that this *first* truth should be something with which one is already acquainted, and even more than just acquainted, something of which one is *immediately certain*. This proposed beginning is not, as such, an accidental representation, or one which might be one thing to one subject and something else to another. For the "I," this immediate consciousness of the self, appears from the start to be both itself an immediate something and something with which we are acquainted in a much deeper sense than with any other representation; true, anything else known belongs to this "I," but it belongs to it as a content which remains distinct from it and is therefore accidental; the "I," by contrast, is the simple **21.63** certainty of its self. But the "I" is, as such, *at the same time* also a concrete, or rather, the "I" is the most concrete of all things – the consciousness of itself as an infinitely manifold world. Before the "I" can be the beginning and foundation of philosophy, this concreteness must be excised, and this is the absolute act by virtue of which the "I" purifies itself and makes its entrance into consciousness as abstract "I." But this pure "I" is now *not* immediate, is not the familiar, ordinary "I" of our consciousness to which everyone immediately links science. Truly, that act of excision would be none other than the elevation to the standpoint of pure knowledge in which the distinction between subject and object has disappeared. But as thus immediately demanded, this elevation is a subjective postulate; before it proves itself as a valid demand, the progression of the concrete "I" from immediate consciousness to pure knowledge must be demonstratively exhibited within the "I" itself, through its own necessity. Without this

[8] The reference here is to Fichte. Cf. *Wissenschaftslehre* (1794), §1.

objective movement, pure knowledge, also when defined as *intellectual intuition*, appears as an arbitrary standpoint, itself one of those empirical *states* of consciousness for which everything depends on whether someone, though not necessarily somebody else, *discovers* it within himself or is able to produce it there. But inasmuch as this pure "I" must be essential, pure knowledge – and pure knowledge is however one which is only posited in individual consciousness through an absolute act of self-elevation, is not present in it immediately – we lose the very advantage which was to derive from this beginning of philosophy, namely that it is something with which everyone is well acquainted, something which everyone finds within himself and to which he can attach further reflection; that pure "I," on the contrary, in its abstract, essential nature, is to ordinary consciousness an unknown, something that the latter does not find within itself. What comes with it is rather the disadvantage of the illusion that we are speaking of something supposedly very familiar, the "I" of empirical self-consciousness, whereas at issue is in fact something far removed from the latter. Determining pure knowledge as "I" acts as a continuing reminder of the subjective "I"
21.64 whose limitations should rather be forgotten; it leads to the belief that the propositions and relations which result from the further development of the "I" occur within ordinary consciousness and can be found pre-given there, indeed that the whole issue is about this consciousness. This mistake, far from bringing clarity, produces instead an even more glaring and bewildering confusion; among the public at large, it has occasioned the crudest of misunderstandings.

Further, as regards the *subjective* determinateness of the "I" in general, pure knowledge does remove from it the restriction that it has when understood as standing in unsurmountable opposition to an object. But for this reason it would be at least *superfluous* still to hold on to this subjective attitude by determining pure knowledge as "I." For this determination not only carries with it that troublesome duality of subject and object; on closer examination, it also remains a subjective "I." The actual development of the science that proceeds from the "I" shows that in the course of it the object has and retains the self-perpetuating determination of an *other* with respect to the "I"; that therefore the "I" from which the start was made does not have the pure knowledge that has truly overcome the opposition of consciousness, but is rather still entangled in appearance.

In this connection, there is the further essential observation to be made that, although the "*I*" might well be determined to be *in itself* pure knowledge or intellectual intuition and declared to be the beginning, in science we are not concerned with what is present *in itself* or as *something inner*, but

with the external existence[9] rather of what in *thought* is inner and with the *determinateness* which this inner assumes in that existence. But whatever *externalization there might be* of[10] intellectual intuition *at the beginning* of science, or – if the subject matter of science is called the eternal, the divine, the absolute – of the eternal or absolute, this cannot be anything else than a first, immediate, simple determination. Whatever richer name be given to it than is expressed by mere being, the only legitimate consideration is how such an absolute enters into *discursive*[11] knowledge and the enunciation of this knowledge. Intellectual intuition might well be the violent rejection **21.65** of mediation and of demonstrative, external reflection. However, anything which it says over and above simple immediacy would be something concrete, and this concrete would contain a diversity of determinations in it. But, as already remarked, the enunciation and exposition of this concrete something is a process of mediation which starts with *one* of the determinations and proceeds to another, even though this other returns to the first – and this is a movement which, moreover, is not allowed to be arbitrary or assertoric. Consequently, that from which the *beginning* is made in any such exposition is not something itself concrete but only the simple immediacy from which the movement proceeds. Besides, what is lacking if we make something concrete the beginning is the demonstration which the combination of the determinations contained in it requires.

Therefore, if in the expression of the absolute, or the eternal, or God (and *God* would have the perfectly undisputed right that the beginning be made with him), if in the intuition or the thought of them, *there is more* than there is in pure being, then this *more* should first *emerge* in a knowledge which is discursive[12] and not figurative;[13] as rich as what is implicitly contained in knowledge may be, the determination that *first* emerges in it is something simple, for it is only in the immediate that no advance is yet made from one thing to an other. Consequently, whatever in the richer representations of the absolute or God might be said or implied over and above being, all this is at the beginning only an empty word and only being; this simple determination which has no further meaning besides, this empty something, is as such, therefore, the beginning of philosophy.

This insight is itself so simple that this beginning is as beginning in no need of any preparation or further introduction, and the only possible purpose of this preliminary disquisition regarding it was not to lead up to it but to dispense rather with all preliminaries. **21.66**

[9] external existence = *Dasein*.
[10] whatever *externalization there might be* of = *was vom . . . da ist*.
[11] *denkende*.
[12] *denkendes*.
[13] *vorstellendes*.

GENERAL DIVISION OF BEING

Being is determined, *first*, as against another in general; *secondly*, it is internally self-determining; *thirdly*, as this preliminary division is cast off, it is the abstract indeterminateness and immediacy in which it must be the beginning.

According to the *first* determination, being partitions itself off from *essence*, for further on in its development it proves to be in its totality only one sphere of the concept, and to this sphere as moment it opposes another sphere.

According to the *second*, it is the sphere within which fall the determinations and the entire movement of its reflection. In this, being will posit itself in three determinations:

I. as determinateness; as such, quality;
II. as sublated determinateness; magnitude, quantity;
III. as qualitatively determined quantity; measure.

This division, as was generally remarked of such divisions in the Introduction,[14] is here a preliminary statement; its determinations must first arise from the movement of being itself, and receive their definitions and justification by virtue of it. As regards the divergence of this division from the usual listing of the categories, namely quantity, quality, relation and modality – for Kant, incidentally, these are supposed to be only classifications of his categories, but are in fact themselves categories, only more abstract ones[15] – about this, there is nothing to remark here, since the entire listing will diverge from the usual ordering and meaning of the categories at every point.

This only can perhaps be remarked, that the determination of *quantity* is ordinarily listed ahead of *quality* and as a rule this is done for no given reason. It has already been shown that the beginning is made with being
21.67 *as such*, and hence with qualitative being. It is clear from a comparison of quality with quantity that the former is by nature first. For quantity is quality which has already become negative; *magnitude* is the determinateness which, no longer one with being but already distinguished from it, is the sublated quality that has become indifferent. It includes the alterability of being without altering the fact itself, namely being, of which it is the determination; qualitative determinateness is on the contrary one with its being, it neither transcends it nor stays within it but is its immediate

[14] Cf. above, 21.38 and 39. [15] Cf A80/B106, B110.

restrictedness. Hence quality, as the determinateness which is *immediate*, is the first and it is with it that the beginning is to be made.

Measure is a *relation*, not relation in general but specifically of quality and quantity to each other; the categories dealt with by Kant under relation will come up elsewhere in their proper place.[16] Measure, if one so wishes, can be considered also a modality; but since with Kant modality is no longer supposed to make up a determination of content, but only concerns the reference of the content to thought, to the subjective, the result is a totally heterogeneous reference that does not belong here.[17]

The *third* determination *of being* falls within the section Quality inasmuch as being, as abstract immediacy, reduces itself to one single determinateness as against its other determinacies inside its sphere. **21.68**

[16] Cf. below, 11.394–409.

[17] There is an almost imperceptible, yet very important difference here between the 1812 and the 1832 edition. In the earlier text, Kant is not mentioned at all, but Hegel seems to accept what is in fact his position regarding modality. In the present text, Kant's position is explicitly mentioned, but Hegel distances himself from it. For the importance of this change, see the editor's "Introduction." Cf. A219/B266.

SECTION I

Determinateness (Quality)

Being is the indeterminate immediate; it is free of determinateness with respect to essence, just as it is still free of any determinateness that it can receive within itself. This reflectionless being is being as it immediately is only within.

Since it is immediate, it is being without quality; but the character of indeterminateness attaches to it *in itself* only in opposition to what is *determinate* or qualitative. *Determinate* being thus comes to stand over and against being in general; with that, however, the very indeterminateness of being constitutes its quality. It will therefore be shown that the *first* being is in itself determinate, and therefore, *secondly*, that it passes over into *existence*, is *existence*; that this latter, however, as finite being, sublates itself and passes over into the infinite reference of being to itself; it passes over, *thirdly*, into *being-for-itself*.

CHAPTER I

Being

A. BEING

Being, pure being – without further determination. In its indeterminate immediacy it is equal only to itself and also not unequal with respect to another; it has no difference within it, nor any outwardly. If any determination or content were posited in it as distinct, or if it were posited by this determination or content as distinct from an other, it would thereby fail to hold fast to its purity. It is pure indeterminateness and emptiness. – There is *nothing* to be intuited in it, if one can speak here of intuiting; or, it is only this pure empty intuiting itself. Just as little is anything to be thought in it, or, it is equally only this empty thinking. Being, the indeterminate immediate is in fact *nothing*, and neither more nor less than nothing. **21.69**

B. NOTHING

Nothing, pure nothingness; it is simple equality with itself, complete emptiness, complete absence of determination and content; lack of all distinction within. – In so far as mention can be made here of intuiting and thinking, it makes a difference whether something or *nothing* is being intuited or thought. To intuit or to think nothing has therefore a meaning; the two are distinguished and so nothing *is* (concretely exists) in our intuiting or thinking; or rather it is the empty intuiting and thinking itself, like pure being. – Nothing is therefore the same determination or rather absence of determination, and thus altogether the same as what pure *being* is.

C. BECOMING

1. Unity of being and nothing

Pure being and pure nothing are therefore the same. The truth is neither being nor nothing, but rather that being has passed over into nothing and

nothing into being – "has passed over," not passes over. But the truth is just as much that they are not without distinction; it is rather that *they are not the same*, that they are absolutely distinct yet equally unseparated and inseparable, and that *each* immediately *vanishes in its opposite*. Their truth is therefore this *movement* of the immediate vanishing of the one into the
21.70 other: *becoming*, a movement in which the two are distinguished, but by a distinction which has just as immediately dissolved itself.

Remark 1

It is customary to oppose *nothing* to *something*. Something is however already a determinate existent that distinguishes itself from another something; consequently, the nothing which is being opposed to something is also the nothing of a certain something, a determinate nothing. Here, however, the nothing is to be taken in its indeterminate simplicity. – If it is deemed more correct to oppose *non-being* to being, instead of nothing, there is no objection to this as regards the result, since in *non-being* there is contained the reference to *being*. Non-being is both, being and its negation as said in *one*: nothing as it is in becoming. But the issue first of all is not the form of opposition, which is at the same time the form of *reference*, but the abstract, immediate negation, the nothing purely for itself, negation devoid of reference – and this can also be expressed, if one so wishes, simply by saying "*nothing*."

The *Eleatics* were the first to give voice to the simple thought of *pure being* – notable among them Parmenides, who declared it to be the absolute and sole truth. In his surviving fragments, he did it with the pure enthusiasm of thought which has for the first time apprehended itself in its absolute abstraction: *only being is, and nothing is not absolutely*.[18] – In the oriental systems, essentially in Buddhism, it is well known that nothing, the void, is the absolute principle. – Against that simple and one-sided abstraction, the profound Heraclitus proposed the loftier, total concept of becoming and said: *being is no more than nothing*; or also, all *flows*, that is, all is *becoming*.[19] – The popular proverbs, particularly the oriental ones, that all that exists has the germ of death in its very birth, that death is on the other hand the entrance into a new life, express at bottom the same union of being and nothing. But these expressions have a substrate in which the transition takes place; being and nothing are held apart in time, represented as alternating in it; they are not thought in their abstraction and also, therefore, not so that they are the same in and for themselves.

[18] Cf. Aristotle, *Metaphysics*, 986b.28–29. [19] Cf. Aristotle, *Metaphysics*, 985b7–8.

Ex nihilo, nihil fit – is one of the propositions to which great significance was attributed in metaphysics. The proposition is either to be viewed as just a barren tautology, nothing is nothing, or, if *becoming* is supposed to have real meaning in it, then, since only *nothing comes* from *nothing*, there is in fact none in it, for the nothing remains nothing in it. Becoming entails that nothing not remain nothing, but that it pass over into its other, being. – Later metaphysics, especially the Christian, rejected the proposition that out of nothing comes nothing, thus asserting a transition from nothing into being; no matter how synthetically or merely imaginatively it took this proposition, there is yet even in the most incomplete unification of being and nothing a point at which they meet, and their distinguishedness vanishes. – The proposition, *nothing comes from nothing, nothing is just nothing*, owes its particular importance to its opposition to *becoming* in general and hence also to the creation of the world out of nothing. Those who zealously hold firm to the proposition, nothing is just nothing, are unaware that in so doing they are subscribing to the abstract *pantheism* of the Eleatics and essentially also to that of Spinoza. The philosophical view that accepts as principle that being is only being, nothing only nothing, deserves the name of "system of identity"; this abstract identity is the essence of pantheism. **21.71**

If the result that being and nothing are the same seems inherently startling or paradoxical, there is not much to be done about it. We should be amazed rather at this amazement that appears so refreshing in philosophy but forgets that the determinations that occur in this science of logic are quite different from those of so-called common sense – which is not exactly sound understanding but an understanding schooled rather in abstractions and in the belief in abstractions, or more accurately in the superstitious belief in them. It would not be difficult to demonstrate the unity of being and nothing in every example, in *every* actual thing or thought. The same must be said of *being* and *nothing* as was said above of immediacy and mediation (which contain a reference to each other and hence *negation*), *that nowhere on heaven or on earth is there anything which does not contain both being and nothing in itself*.[20] To be sure, since we are speaking here of a *certain something* and a *certain actual thing*, those determinations are no longer present in the complete untruth in which they are as being and nothing; they are rather present in some more advanced determination and are grasped, for example, as *positive* or *negative*, the one as reflected being and the other as reflected nothing; but the positive contains being **21.72**

[20] Cf. above, 21.54.

and the negative contains nothing, as their abstract foundation. – Thus even in God quality carries essentially the determination of the negative: *activity*, *creation*, *power*, and so forth, are the bringing forth of an *other*. But an empirical elucidation of the claim by means of examples would be entirely superfluous here. For from now on this unity of being and nothing will stand once and for all as foundation, as first truth, and will thus constitute the element of all that follows. All further logical determinations besides *becoming* itself (existence, quality, and in general all the concepts of philosophy) are therefore examples of this unity. – As for that sense that styles itself as common or sound, if it rejects the inseparability of being and nothing, let it try to produce an example in which the one is found separate from the other (let it separate something from limit or limitation, or, as just said, the infinite, God, from activity). Only the empty figments of thought, being and nothing, only these, are separate things, and they are the ones which are accorded priority by common sense over the truth, the inseparability of the two which is everywhere before us.

We cannot hope to address all the confusions in which ordinary consciousness lands itself in connection with this logical proposition, for they are inexhaustible. Only a few can be cited. One cause among others of such confusions is that consciousness brings with it, to such an abstract logical proposition, the figure of some concrete thing, forgetting that the issue here is not anything concrete but only the pure abstractions of being and nothing and that these alone are to be held firmly in mind.

Being and non-being are the same; *therefore* it is the same whether I am or am not, whether this house is or is not, whether these hundred dollars are in my possession or not. – This conclusion from the proposition, or this application of it, alters its meaning completely. The proposition contains the pure abstractions of being and nothing; but the application makes of them a determinate being and a determinate nothing. But, as we have said, determinate being is not an issue here. A determinate, a finite being, is one that refers to another; it is a content that stands in the relation of necessity to another content, to the whole world. As regards
21.73 the reciprocal determinations that hold the whole together, metaphysics could make the basically tautological claim that if one speck of dust were destroyed the whole universe would collapse. In the instances adduced against our proposition, something appears as not indifferent to whether it is or is not, not on account of being or non-being, but because of its *content* which connects it with some other content. If a determinate content, some determinate being, is *presupposed*, this being, since it is *determinate*, stands in manifold reference to another content. It is not a matter of indifference

to it whether a certain other content to which it refers is or is not, for only through such a referring is it essentially what it is. The same applies to *representing* (inasmuch as we take non-being in the determinate sense of representing as contrasted with actuality). In this case the being or the absence of a content, which is a determinate representation that refers to another, is not a matter of indifference. –

This observation already contains what constitutes a capital point in the Kantian critique of the ontological proof of God's existence, although we only consider it here with reference to the distinction that comes up in it of being and nothing in general and of *determinate* being or non-being. – As we know, that so-called proof presupposed the concept of a being that possesses all realities, including therefore *concrete existence*, which it likewise assumed as one of the realities. Kant's critique took mainly the line that *existence* or being (the two taken here as synonymous) is not a *property* or a *real predicate*, that is to say, not a concept of something that can be added to the *concept* of a thing.[g] – What Kant means to say is that being is not a content determination. – Therefore, he goes on, the possible does not contain more than the actual; a hundred actual dollars do not contain a whit more than a hundred possible ones;[21] – that is, the actual one hundred have no other content determination than the possible. And in fact, considered **21.74** in isolation, it is a matter of indifference to this content whether it is or is not; there is no distinction of being and non-being in it, this distinction does not affect it at all; the one hundred dollars do not become less if they do not exist, or more if they do. Any distinction would have to originate from elsewhere. – "But in my financial state," Kant reminds us, "there is more to a hundred actual dollars than there is to the mere concept of them (that is, their possibility). For with actuality the *intended object* is not merely included in my concept analytically, but is *synthetically* added to my *concept* (which is a *determination* of my *state*), without the thought itself of the hundred dollars being in the least increased by this being which they have outside my concept."[22]

Here two kinds of "states" (to retain Kantian expressions which are not free of a confused awkwardness) are *presupposed*: one that Kant calls "concept," by which we must understand "representation"; and another, my "financial state." For the one as for the other, for the finances and the representation, the hundred dollars are a content determination, or

[g] *Kant's Critique of Pure Reason*, 2nd edn, pp. 628ff.

[21] A598/B626–A599/B627. The following dash, presumably, is to set off Hegel's own gloss on the paraphrase of Kant's own words.

[22] A599/B627.

"they are added to each *synthetically*," as Kant puts it. "I," as *possessing* a hundred dollars or as not possessing them, or again, "I," as *representing* a hundred dollars to myself or as not representing them, is of course a different content. Stated more generally: the abstractions of being and nothing both cease to be abstractions by receiving a determinate content; being is then reality, the determinate being of one hundred dollars; and nothing is negation, the determinate non-being of the same dollars. This determinate content itself, the hundred dollars, also abstracted by itself, is unaltered the same in the one as in the other. But when being is further taken as a financial state, the hundred dollars refer to this state, and for this state their determinate content is not a matter of indifference; their being or non-being is only an *alteration*; they are transposed into the sphere of *existence*. When it is therefore urged against the unity of being and nothing that it is not a matter of indifference whether this or that (the hundred
21.75 dollars) are or are not, the deception is to project the difference, whether I *have* or *do not have* the hundred dollars, into the difference merely of being and non-being. And this is a deception, as we have shown, based on a one-sided abstraction that leaves out the *determinate existence* present in such examples and retains only being and non-being; just as, conversely, it transforms the abstract being and non-being that should be apprehended into a determinate being or non-being, into an existence. Only *existence* contains the real distinction of being and nothing, namely, a *something* and an *other*. – This real distinction is the one that comes to mind in representation instead of that of abstract being and nothing and their merely intended distinction.

As Kant puts it, "through existence something enters into the context of the whole experience . . . We obtain one more object of *perception*, but our *concept* of the intended object is not thereby augmented."[23] – This only means, as follows from our explanation, that through existence, essentially because something is a determinate existence, this something is in relationship to *others*, and also to a perceiver among these others. – "The concept of a hundred dollars," Kant says, "is not augmented through perception."[24] By "concept" is meant here the above noted hundred dollars represented *in isolation*. As so isolated, these dollars are indeed an empirical content, but cut off, without connection or determinateness as against *something else*; their form of immediate self-identity deprives them of external connection and makes them indifferent to whether they are perceived or not. This so-called concept of a hundred dollars is however a false concept; the form

[23] A599/B627–A600/B628. [24] A599/B627.

of simple self-reference does not belong to such a limited, finite content itself; it is a form on loan to it, like a dress, by a subjective understanding; a "hundred dollars" is nothing self-referring but something alterable and perishable.

This thinking or imagining which has before it only a determinate being, existence, must be referred back to the previously mentioned beginning of **21.76** science which Parmenides made – the one who purified and elevated to *pure thought*, to being as such, his own otherwise pictorial representations and hence also those of posterity, thus ushering in the element of science. – What is the *first* in *science* had of necessity to show itself to be the *first historically*. And we must regard the *one* or the *being* of the Eleatics as the first instance of knowledge by thought. *Water* and suchlike material principles are indeed *meant* to be the universal even though, as things material, they are not pure thoughts; *numbers* are neither the first simple, nor the self-abiding thought,[25] but thought rather which is entirely self-external.

The move from *particular finite* being to being as such in its totally abstract universality is to be regarded not only as the very first theoretical demand but also as the very first practical one. For when a lot of fuss is made about the hundred dollars, that it does make a difference to my financial state whether I *have* them or *not*, still more whether I am or am not or something else is or is not, we can then be reminded that the human being (quite apart from such financial situations in which the possession of a hundred dollars will in fact be a matter of indifference) ought to raise his mind to this abstract universality in which it is in fact indifferent to him whether the hundred dollars, whatever the quantitative relation that they might have to his financial state, are or are not; just as it would be indifferent to him whether he himself is or is not, that is, whether he is or is not in finite life (by which is meant a state, a determinate being), and so on. *Si fractus illabatur orbis, impavidum ferient ruinæ*, a Roman even said,[26] and still more ought the Christian to find himself in this state of indifference.

Still to be noted is the immediate connection between, on the one hand, the elevation above the hundred dollars and finite things generally, and, on the other hand, the ontological proof and the mentioned Kantian criticism of it. This criticism, because of its popular example, has won universal plausibility. Who does not know that a hundred actual dollars are different

[25] *bey sich bleibende.*

[26] Flaccus: *Carminum liber tertium*. Ode III, verse 7–8. "If the world were to fall to pieces, the ruins would still sustain the undaunted."

from a hundred merely possible dollars and that they make a difference to my financial situation? This difference is easily demonstrable in the case of the hundred dollars: therefore, the concept, that is, the determinateness of the content as empty possibility, and being are different from each other; *therefore*, the concept of God and his being are also different, and just as I cannot extract from the possibility of the hundred dollars their actuality, I can just as little "extract"[27] God's existence from his concept. But the
21.77 ontological proof consists precisely in thus extracting God's existence from his concept. Now, though there is of course truth to the claim that the concept is different from being, God's difference from the hundred dollars and other finite things is yet greater. It is the *definition of finite things* that in them concept and being are different; that the concept and reality, soul and body, are separable; that they are therefore perishable and mortal. The abstract definition of God, on the contrary, is precisely that his concept and his being are *unseparated* and *inseparable*. The true critique of the categories and of reason[28] is just this: to acquaint cognition with this distinction and to prevent it from applying to God the determinations and the relations of the finite.

Remark 2

Yet another reason can be cited that helps to explain the resistance to the proposition about being and nothing. This reason is that, as expressed in the proposition "*being and nothing are one and the same*," the result of considering being and nothing is incomplete. The accent falls primarily on the being-*one-and-the-same*, as is the case in judgment generally, where the predicate says what the subject *is*. Consequently, the sense seems to be that the distinction is denied which yet patently occurs in the proposition at the same time; for the proposition says both determinations, being and nothing, and contains them as distinguished. – At the same time, the meaning cannot be that abstraction ought to be made from the two determinations and only their unity retained. This sense would be manifestly one-sided, since that from which abstraction would be made is equally present in the proposition and explicitly named there. – Now, in so far as the proposition "*being and nothing are the same*" expresses the identity of these determinations, yet in fact equally contains the two as distinguished, it internally contradicts itself and thus dissolves itself. And if we concentrate on this result, what we have before us is a proposition which, on closer inspection,

[27] Cf. A603/B631.

[28] Kant's critical work was in his day generically referred to as "the critique of reason."

turns out to vanish spontaneously. It has movement. But in thus vanishing, it is its proper content which comes to be in it, namely *becoming*.

The proposition thus *contains* the result; it is this result *implicit in it*. But the circumstance to which we must pay attention here is the defect that **21.78** this result is not itself *expressed* in the proposition; it is external reflection that recognizes it there. – In this connection, we must observe right at the beginning that the proposition, in the form of *a judgment*, is not adept to express speculative truths; recognition of this circumstance would go a long way in preventing many misunderstandings of speculative truths. Judgment joins subject and object in a connection of *identity*; abstraction is therefore made from the fact that the subject has yet more determinacies than the predicate has, just as that the predicate is wider than the subject. Now, if the content is speculative, the *non-identity* of subject and predicate is also an essential moment; but this is not expressed in judgment. The paradoxical and even bizarre light in which much of recent philosophy is cast for those not intimate with speculative thought is due in many ways to the form of the simple judgment when used to convey speculative results.

For the purpose of expressing the speculative truth, the defect is first remedied by adding the contrary proposition, namely "*being and nothing are not the same*," which we also stated above. But another defect then crops up, for these propositions are disconnected and therefore present their content only in an antinomy, whereas the content refers to one and the same thing, and the determinations expressed in the two propositions should be united absolutely – in a union which can then only be said to be an *unrest* of simultaneous *incompatibles*, *a movement*. The commonest injustice done to a speculative content is to render it one-sidedly, that is, to give prominence only to one of the propositions in which it can be resolved. This proposition is then undeniably asserted; but *the statement is just as false as it is correct*, for once one proposition is taken out of its speculative context, the other also must be given at least as much attention and articulation. – Attention must also be drawn at this point to, so to speak, the unfortunate word "unity." "Unity," even more so than *identity*, designates a subjective reflection. It is normally taken as a connection that arises from *comparison*, from external reflection. Inasmuch as this reflection finds the same thing in two *different subject matters*, a unity is there with **21.79** respect to which complete *indifference* is presupposed on the part of the subject matters compared, so that the comparing and the unity do not touch these subject matters themselves but are rather a doing and a determining external to them. Unity thus expresses a totally *abstract* sameness, and it will sound all the harsher and the more discordant the more the terms of

which it is asserted show themselves to be utterly distinct. For this reason it would therefore be better to say simply *unseparatedness* and *inseparability*; but then the *affirmative aspect* of the connection of the whole would not be expressed.

So the whole true result that we have here before us is *becoming*, but a becoming which is not the merely one-sided or abstract unity of being and nothing. It consists rather in this movement, that pure being is immediate and simple and for that very reason is just as much pure nothing; that the distinction between them *is*, but equally *sublates itself* and *is not*. This result does also assert, therefore, the distinction of being and nothing, but it asserts it as one which is merely *intended*.

The *ordinary assumption* is that being is the absolutely other of nothing, and that there is nothing as clear as this absolute distinction; indeed, nothing seems easier than being able to state it. But it is just as easy to convince oneself that this is impossible, that the distinction is *unsayable*. *Let those who insist on the distinction of being and nothing, let them just try to state in what the distinction consists*. If being and nothing had any determinateness differentiating them, then, as we said, they would be determinate being and determinate nothing, not the pure being and the pure nothing which they still are at this point. Their distinction is therefore completely empty, each is as indeterminate as the other; the distinction depends, therefore, not on them but on a third element, on *intention*. But intention is a form of subjectivity, and subjectivity does not belong to the present order of exposition. The third element in which being and nothing have their subsistence must however also be present here; and it is present indeed, it is *becoming*. In becoming, they are present as distinct; becoming only occurs to the extent that they are distinguished. This third is an other than they – they subsist only in an other, which is equivalent to saying that they do not subsist on their own. Becoming equally is the subsistence of being and of non-being; or their subsistence is only their being in a *one*; precisely this, their subsistence in a *one*, is that which equally sublates their distinction.

21.80 The challenge to produce the distinction between being and nothing also brings with it the challenge to state what, then, is *being*, and *what is nothing*. Those who resist acknowledging that the two are equally only a *transition* of the one into the other, and who assert this or that about being and nothing, let them declare *whereof* they speak, that is, let them advance *a definition* of being and nothing, and let them demonstrate that it is correct. Without having satisfied this first demand of the ancient science, whose logical rules they otherwise accept and apply, all their assertions about being and nothing are only assurances without scientific validity. If it has somewhere

been said that existence,[29] which is held from the start to be equivalent to being, is the *completion* of *possibility*, then another determination, namely possibility, is presupposed along with it; so being is not declared in its immediacy but precisely as not standing on its own, as conditioned. For being which is *mediated*, we shall reserve the expression *concrete existence*.[30] But the common practice is to *imagine* being, as if it were a picture of pure light, the clarity of unclouded seeing, and then nothing as the pure night – and the distinction between the two is then enshrined into this well-known sensuous difference. But in fact, if this very seeing is more accurately imagined, one can readily perceive that in absolute light one sees just as much and just as little as in absolute darkness; that the one seeing is just as good as the other; that pure seeing is a seeing of nothing. Pure light and pure darkness are two voids that amount to the same thing. Only in determinate light (and light is determined through darkness: in clouded light therefore), just as only in determinate darkness (and darkness is determined through light: in illuminated darkness therefore), can something be distinguished, since only clouded light and illuminated darkness have distinction in them and hence are determinate being, *existence*.

Remark 3

The unity, whose moments, being and nothing, are inseparable, is at the same time different from these moments. It thus stands as a *third* with respect to them – a third which, in its most proper form, is *becoming*. *Transition* is the same as becoming except that the two terms, from one of which the transition is made to the other, are represented in it more as at rest, outside each other, the transition occurring *between* them. Now, **21.81**
wherever and however being or nothing are at issue, this third must be there; for the two have no subsistence on their own but are only in becoming, in this third. But this third has various empirical shapes that abstraction either sets aside or neglects for the sake of holding fast to its two products, being and nothing, each for itself, and showing them as protected against

[29] "I define existence as the complement of possibility." Wolff, *Philosophia prima, sive ontologia* (1736), §174. Hegel uses here the term "*Existenz*," which I normally translate as "concrete existence" to differentiate it from "*Dasein*." See the note immediately following.

[30] For the distinction between *Existenz* and *Dasein*, see "Issues of translation" in the editor's "Translator's note." To be noted here is that both terms signify "being" as determinate and therefore as mediated. But the difference is whether the mediation is explicitly expressed within the structure of the logical object itself (as it is the case with *Existenz*, which explicitly refers to "essence") or is only immediately present there (as it is the case with *Dasein*). I translate *Existenz* as "concrete existence" because of the immediately preceding mention of "possibility" that definitely places it within the realm of "essence," which is the realm of explicit mediation.

transition. Such a simple manoeuver of abstraction can be countered, with equal ease, simply by pointing to the empirical concrete existence in which that abstraction itself is only a something, has a determinate existence. Or else it is by virtue of other forms of reflection that this separation of the inseparable would be held fixed. But in any such determination of reflection, its opposite is present within it in and for itself, and it is thus possible to refute it on its own terms without going back to the nature of the fact and appealing to it, by taking the determination as it presents itself, and by pointing to its other in it. It would be labor in vain to attempt to ensnare, so to speak, all the shifts and turns of reflection and its argumentation in order to pre-empt and render impossible all the evasions and the leaps with which it hides its own contradiction from itself. For this reason I also refrain from taking notice of the many self-styled objections and refutations that have been advanced against the claim that neither being nor nothing are something true but that becoming is their truth. The intellectual education required to perceive the nothingness of these refutations, or rather to dispel such arbitrary ideas on one's own, will be attained only through a critical cognition of the forms of the understanding. But those who are the most prolific in such objections straight away set themselves upon reflecting on the first propositions, without helping themselves or having helped themselves through further study of the logic to the awareness of the nature of their crude reflections.

We shall consider some of the cases that occur when being and nothing are posited in isolation, each outside the sphere of the other, with the result that the transition is negated.

Parmenides held fast to being and was the most consistent, since he also said of nothing that it *absolutely is not*; only being is.[31] Totally for itself, being is thus the indeterminate, and has therefore no connecting reference to any other; consequently, it seems that *from this beginning* no further *forward move* is possible – that is, from that beginning itself – and that
21.82 an advance can only occur by adding something foreign to it *from outside*. The advance, where being is the same as nothing, thus appears as a second, absolute beginning – a transition which is for itself, and that would be added to being externally. Being would not be an absolute beginning at all if it had a determinateness; in that case, it would depend on another and would not be immediate, would not be the beginning. If, however, it is indeterminate and is therefore a true beginning, it has nothing by virtue of which it can

[31] *Die Fragmente der Vorsokratiker* (*The Fragments of the Pre-Socratics*) Volume II, ed. Hermann Diels and Walther Kranz (Berlin: Weidmannsche Verlagsbuchhandlung, 1956), Parmenides, 232B6.

pass over to an other; as beginning it is equally the *end*. It is just as impossible for anything to break out of it as to break into it; with Parmenides as with Spinoza, there is no advance from being or from absolute substance to the negative, the finite. If there is forward movement nevertheless – something which, as just remarked, can occur only externally if we start from being devoid of any connecting reference and so without forward movement – then, this advance is a second, new beginning. Thus, Fichte's most absolute, unconditional first principle, A = A, is a *positing*, a *thesis*; the second principle is a *counter-positing*, an *antithesis*; this latter should be *partly* conditioned, *partly* unconditioned (and so contradiction in itself).[32] This is an advance by external reflection that negates the absolute with which it makes its beginning (the counter-positing is the negation of the first identity) while at the same time equally reducing its second absolute, explicitly, to something conditioned. But if there were any justification at all for the advance, that is, for sublating the first beginning, then the possibility that an other could connect with it would have to lie in the nature of this first beginning itself; the beginning would have to be, therefore, a *determinate* being. But *being*, as also the absolute substance, will not be such, quite the contrary. Being is the *immediate*, the still absolutely *indeterminate*.

The most eloquent, perhaps most forgotten accounts of the impossibility of advancing from an abstraction to something beyond it, and of uniting the two, are given by Jacobi in support of his polemic against the Kantian *a priori synthesis* of self-consciousness, in his *Treatise Concerning the Undertaking of Critique to Reduce Reason to the Understanding* (Jacobi, *Werke*, Vol. III).[33] He defines the task (p. 113) as one of demonstrating the originating or the producing of a synthesis in a *pure somewhat*, be it consciousness, space or time. "Let space be *a one*; time *a one*; consciousness *a one*. Now, do say how any of these three 'ones' *purely* turns itself internally into a manifold: each is *a one* and *no other*; an all-the-same-ness; **21.83**
just *selfhood* in general without a he-hood, she-hood, or it-hood, for these still slumber together with the *he*, *she*, *it* in the infinite zero of the indeterminate from which each and every *determinate being* has yet to proceed! What brings *finitude* into these three infinitudes? What impregnates space and time *a priori* with number and measure, and turns them into a *pure manifold*? What brings *pure spontaneity* ('I') into oscillation? How does its pure vowel sound come to its concomitant sound, the consonant, or better, how does its *soundless*, uninterrupted *sounding* interrupt itself and break off in order to gain at least some kind of self-sound, an *accent*?" One

[32] Cf. Fichte, *Wissenschaftslehre* (1794) §§1, 2; GA I.2. [33] Leipzig, 1816.

sees that Jacobi very distinctly recognized that abstraction is a *nonentity*, whether this *nonentity* is the so-called absolute (only abstract) space, or the equally abstract time or abstract pure consciousness, the "I." He insists on this nonentity for the sake of maintaining the impossibility of any advance to an other, which is the condition of a synthesis, and to a synthesis itself. The synthesis which is the point of interest here must not be taken as a tying together of *external* determinations already at hand. Rather, the issue is twofold: one of the genesis of a second next to a first, of a determinate something next to something which is initially indeterminate, but also one of *immanent* synthesis, of synthesis *a priori* – a unity of distinct terms that exists in and for itself. *Becoming* is this immanent synthesis of being and nothing; but because the sense most closely attached to "synthesis" is that of an external gathering of things externally at hand, the name of synthesis, of synthetic unity, has rightly gone out of use. – Jacobi asks, *how* does the pure vowel of the "I" come to its concomitant sound, to the consonant? *what* brings determinacy to indeterminateness? – The question of the *what* would be easy to answer, and has been answered by Kant in his way. The question of the *how*, however, means: in which way and manner? in what relation? and so forth, and requires the application of a particular category; but there can be no question here of a "way" or "manner," of the categories of the understanding. The question of the *how* is itself one that belongs to the bad practices of reflection, which demands comprehensibility, but for that it presupposes its fixed categories and is thereby assured from the start to be forearmed against the answer to what it asks. Nor does the question have in Jacobi the higher sense of a query regarding the *necessity* of the synthesis, for Jacobi, as we said, remains fixed in the abstractions in order to assert the impossibility of the synthesis. Especially graphic is his description (p. 147) of the procedure for attaining the abstraction of space. "For a time I must try clean to forget that I ever saw anything, heard, touched or moved anything, myself expressly not exempted. Clean, clean, clean must
21.84 I forget all movement, and let precisely this *forgetting* be my most pressing concern, since it is the hardest. Just as I have thought all things away, so must I also get perfectly *rid* of them all, retaining nothing at all except the intuition, which *violently* held its ground, of the infinite *immutable* space. I may not, therefore, *think* even myself *back into it* as something distinguished from it yet equally bound to it; I may not let myself even be merely *surrounded* and *pervaded* by it, but I must rather *give myself over* to it totally, become a one with it, transform myself into it; I must allow no leftover of myself except *this my intuition* itself, in order to behold it as a truly self-subsisting, independent, single and sole representation."

With this totally abstract purity of continuity, that is, with this indeterminateness and emptiness of representation, it is indifferent whether one names this abstraction "space" or "pure intuition" or "pure thought." It is altogether the same as what an Indian calls Brahma, when for years on end, looking only at the tip of his nose, externally motionless and equally unmoved in sensation, representation, phantasy, desire, and so on, he inwardly says only *Om, Om, Om*, or else says nothing at all. This dull, empty consciousness, taken as consciousness, is just this – *being*.

In this void, Jacobi now states further, he encounters the opposite of what should happen to him according to Kant's assurance. He does not find himself to be a *many* and a *manifold* but to be rather a one without any plurality and manifoldness; indeed, "I am *impossibility* itself, the *nihilating* of all things manifold and plural – *cannot*, from my pure, absolutely simple and unchanging essence, *produce again*, or conjure in me as shadow, even *the least bit of anything* . . . Thus all externality and juxtaposition, any manifoldness and plurality dependent on them, are revealed in this purity as a *pure impossibility*."[34]

The meaning of this impossibility is nothing else than the tautology: I hold fast to abstract unity and exclude all plurality and manifoldness; I keep myself in indistinctness and indeterminacy, and look away from anything distinguished and determinate. Kant's *a priori* synthesis of self-consciousness, that is, the work of this unity of differentiating itself but in this differentiation of preserving itself, is diluted by Jacobi to just this abstraction. He one-sidedly reduces that "synthesis *in itself*," the "*original parting of judgment*,"[35] to "*the copula in itself*; – an '*is, is, is*' without beginning and end, without 'what', 'who', or 'which'; this repetition of repetition *ad infinitum* is the one single occupation, function, and production of the purest of all pure syntheses; the synthesis is itself this mere, pure, absolute repetition."[36] Though, in fact, since there is no pause in it, that is, no negation, no distinguishing, the synthesis is not a repetition but rather undifferentiated simple being. – But then, is this still a synthesis when Jacobi leaves out precisely that which makes the unity a synthetic unity? **21.85**

First of all, it must be said that when Jacobi assumes his position in absolute (that is, abstract) space, time, and consciousness as well, he transposes himself into something which is *empirically* false, and fixes himself there. *There is* no such thing as a spatially or temporally unlimited space or time, that is, none is empirically at hand which would not be filled with a continuous manifold of limited existence and of change, so that these

[34] pp. 148ff., paraphrase. [35] "parting of judgment" = *Urteil*. [36] pp. 125ff., paraphrase.

limits and these changes would not belong, unseparated and inseparably, to spatiality. Consciousness is likewise filled with determinate sensation, representation, desire, and so forth; it does not exist *in concreto* apart from some particular content or other. – The *transition* to the empirical then goes without saying. Consciousness can indeed make empty space, empty time, and even empty consciousness or pure being, its intended object and content, but it does not stay with them. Rather, from this emptiness it passes over – more than that, it forces itself over to a better content, that is, one which is somehow more concrete and to this extent, however bad as content, still better and truer. Precisely such a content is the synthetic as such, "synthetic" understood in its more general sense. Thus Parmenides has to make do with semblance and opinion, the opposite of being and truth; Spinoza likewise, with attributes, modes, extension, movement, understanding, will, and so forth. The synthesis contains as well as exposes the untruth of those abstractions; in it they are in unity with their other, are not therefore as self-subsistent, not as absolute but strictly as relative.

The demonstration of the empirical nullity of empty space and so forth is not however the task here. Consciousness can of course, by means of abstraction, fill itself with such indeterminateness, and the abstractions to which it thus holds fast are *the thoughts* of pure space, time, pure consciousness, pure being. It is the thought of pure space etc. (that is, pure space etc. taken *in themselves*) which is to be demonstrated to be null, that is, what must be demonstrated is that, as such a thought, its opposite has already forced its way into it, that by itself it is already being that has gone outside itself, a determinateness.

But this happens in them immediately. They are, as Jacobi correctly describes them, results of abstraction; they are expressly determined as
21.86 *indeterminate* – and this, to go back to their simplest form, is being. This *indeterminateness* is however precisely what constitutes their determinateness. For indeterminateness is opposed to determinateness; as opposed, it is therefore itself something determinate or negative – the pure, entirely abstract negative. This indeterminateness or abstract negation which thus has being in it is that to which reflection, whether external or internal, gives voice when it equates such a being with nothing, when it declares it to be an empty product of thought, a nothingness. – Or, one can say, since being is the indeterminate, it is not the (affirmative) determinateness that it is; it is not being but nothing.

In the pure reflection of the beginning as it is made in this Logic with *being* as such, the transition is still hidden; because *being* is posited as

immediate, the *nothing* only breaks out in it immediately. All the subsequent determinations are however more concrete, like *existence* which follows right after; there is already *posited* in existence that which contains and produces the contradiction of those abstractions, and consequently their transition. In being, when taken in that simplicity and immediacy, the memory that it is the result of a perfect abstraction, and that it is therefore already abstract negativity, nothing, is left back behind the science which, starting explicitly from *essence*, will exhibit that one-sided *immediacy* as a mediated immediacy where being is *posited* as *concrete existence*, and that which mediates being, the ground, is also *posited*.

With the recovery of this memory, it is possible to present the transition from being to nothing, or also, as it is said, to *clarify* it and make it *comprehensible*, as something itself easy and trivial. Of course, the being which is made into the beginning of science is a nothing, since it is possible to abstract from everything, and when abstraction is made from all, nothing is left over. However, one can continue, so understood the beginning is nothing affirmative, not being, but just nothing, and nothing is then the *end*, at least as much as immediate being, and even more so. Shortest is to **21.87**
let such an argument run its course and to observe how the results of which it boasts take shape. That "nothing" is the result of the argument, and that the beginning would then have to be made with nothing (as in Chinese philosophy)[37] need not cause us to lift a finger. For even before we had lifted it, this nothing would have turned into being just as much (see Section B above, "Nothing"). But further, if we presuppose the said abstraction from *everything* (an "everything" which is an *existent* nevertheless), such an abstraction must be defined with greater exactitude. The result of such an abstraction from everything existent is first of all abstract being, *being* in general. For just as in the cosmological proof of the existence of God from the contingent being of the world, where we ascend above this contingent being, *being* is still taken up with us in the ascent; it is determined as *infinite being*. But of course, one *can* abstract also from this pure being. Being *can* be thrown in with the everything from which abstraction has already been made, and then *nothing* remains. Now, if we want to ignore the *thinking* of nothing, that is, that it turns around into being, or would know nothing of it, one *can* indeed proceed in this way in the style of the "*one can*." One can (God be praised!) even abstract from nothing (for the creation of the world, too, is an abstraction from nothing). But then, what remains

[37] Apparently Hegel is associating Buddhism with China. Cf. above, 21.70, where Hegel speaks of oriental philosophies.

is not nothing, since abstraction would be made even from it and so we would be back at being again. – This "*one can*" generates an external play of abstraction in which the abstracting itself is only the one-sided activity of the negative. Directly implied in this very "one can" is that being is just as indifferent to it as nothing, and that as the one vanishes, the other appears in turn; but whether a beginning is made with the activity of nothing or with nothing is equally indifferent, for the activity of nothing, that is, the mere abstracting, is neither more nor less true than the mere nothing.

Plato's dialectical treatment of the One in the *Parmenides* must also be regarded rather as a dialectic of external reflection. Being and the One are both Eleatic forms which are the same thing. But, as Plato understands them in that dialogue, they are also to be distinguished. After he removes from the One the various determinations of whole and parts, of being-in-itself, of being-in-another, etc.; of figure, time, etc., his result is that being does not pertain to the One, for being does not accrue to a something except according to one of these forms. (Ed. Stephanus, Vol. II, p. 141e.) Plato then turns to the proposition, "*the One is*"; and it is there that we can see how, starting from this proposition, he performs the transition to the non-being of the One. It happens by way of a *comparison* between the two determinations of the presupposed proposition, namely of "*the One is*." This proposition contains "the One" and "being"; but "the one *is*" contains more than when one only says "the One." In this, in their being *distinguished*, the moment of negation is demonstrated. It is clear that this
21.88 method has a presupposition and is an external reflection.

Just as the One is posited here in combination with being, so is being, which should be held fast abstracted *by itself* in the simplest form without entering into thought, exhibited in a combination that entails the opposite of what should be asserted. Taken in its immediacy, being belongs to a *subject*, is something said, has an empirical *existence* in general, and therefore stands on a ground of restriction and negativity. Whatever the expressions or the turns of phrase that the understanding adopts in protesting against the unity of being and nothing, however much it appeals to what is immediately given, it will find precisely in this experience nothing but *determinate* being, being with a restriction or negation – the very unity which it rejects. The assertion of immediate being thus comes down to an empirical concrete existence, and it cannot reject the demonstration of it, since it is the immediacy outside thought to which it wants to cling.

The same is the case with *nothing*, only in the contrary way. This is a well-known reflection, made often enough respecting nothing. When taken in its immediacy, nothing shows itself as *existing*; for it is by nature

the same as being. Nothing is thought of, represented; it is spoken about; it therefore *is*; nothing has its being in thinking, representing, speaking, etc. But, further, this being is also distinguished from it; it is therefore said that nothing is indeed in thinking or representing, yet for that very reason it is not *it* which *is*, it is not *it* to which being belongs, that only thinking or representing are this being. Even on this distinction, there is no denying that nothing *refers* to a being; but in this reference, though the latter equally also contains distinction, there is a unity with being. In whatever way nothing is said or demonstrated, it shows itself in combination with or, if one prefers, in touch with a being, unseparated from a being, that is to say, precisely in a *determinate existence*.

But when the presence of nothing in a determinate existence is thus demonstrated, this distinction of it from being still commonly comes to mind, namely that the existence of the nothing is nothing at all that pertains to it *per se*. It is said that nothing does not have being in it; that it *is* not *being as such*; that it is rather an absence of being, just as darkness is only the *absence* of light, cold only the absence of warmth, and so forth. It is said that darkness has meaning only with reference to the eye, by being externally compared with the positive, with light, just as cold is something only in our sensation, whereas light, warmth, just like being, are on the contrary objective on their own, they are the real, the effective, of quite another quality and dignity than those negatives, than nothing. One can often find it advanced as a very weighty reflection and a significant item of cognition that darkness is *only absence* of light, cold *only absence* of warmth. Regarding this astute reflection, it can be observed empirically in this field of empirical subject matters that darkness in fact shows its effective presence in light by determining it as color and thereby imparting visibility to it in the first place, because, as we said above, one can see just as little in pure light as in pure darkness. Visibility, however, is an effect in the eye, and the said negative makes just as much of a contribution to it as does the light that passes for the real, the positive; similarly, cold makes itself present enough to water, to our sensation, and so forth, and if we deny its so-called objective reality, we thereby stand to gain absolutely nothing against it. And we should further repeat[38] the complaint that here the talk is again of a negative with determinate content; that one has not restricted oneself to the nothing, with respect to which, so far as empty abstraction goes, being is neither at a loss nor at an advantage. – But we must equally take cold, darkness, and similar determinate negations, just for themselves, and, in

21.89

[38] Cf above, 21.72 and 75.

respect to their general determination which is at issue here, let us see what is posited thereby. They are supposed to be not nothing in general, but the nothing rather of light, warmth, and so forth, of something determinate, of a content; thus they are a determinate, "contentful nothing" if one may so speak. A determinateness, however, as will be found later on, is itself a negation; thus they are negative nothings; a negative nothing is however something affirmative. The conversion of nothing into an affirmative by virtue of its determinateness (which previously appeared as *a determinate existence* in a subject or in what have you) appears to a consciousness bound to the abstraction of the understanding as the greatest paradox. Simple as
21.90 it is, or rather because of its very simplicity, the insight that the negation of negation is something positive appears a trivial matter to which the haughty understanding need pay no heed, even though its correctness is undeniable – and not just its correctness, but also, on account of the universality of the determinations involved, its infinite extension and universal applicability, so that it would indeed be well to pay heed to it.

Regarding the determination of the transition of being and nothing into each other, the further remark can be made that such a transition is to be taken just as it is without additional reflective determination. It is immediate and entirely abstract, on account of the abstractness of the moments in transition, that is, because there is yet to be posited in these moments the determinateness of the other through which they have undergone the transition. Nothing is not yet *posited* in being, even though being is *essentially* nothing, and the other way around. It is therefore improper to apply here more determinate mediations, and to take being and nothing in some relation – their transition is not yet a relation. Thus it is inadmissible to say: nothing is the ground of being, or being is the ground of nothing; nothing is the *cause* of being, and so forth; or, the transition into nothing can have occurred only *under the condition* that something is, or the transition into being only *under the condition* of non-being. The mode of the connecting reference cannot be further determined without the connected *sides* being at the same time also further determined. The connection of ground and consequent, and so forth, no longer has mere being and nothing for the sides which it binds, but has being expressly as ground, and something which, although only posited and not standing on its own, is however not abstract nothing.

Remark 4

One can gather from the preceding what to think of the dialectic directed against the *beginning of the world* and also its end (that dialectic which

would prove the *eternity* of matter), that is, of the dialectic directed at *becoming*, against coming-to-be or passing-away in general. (Kant's antinomies regarding the finitude or the infinity of the world in space and time will be more closely considered below, under the concept of the quantitative infinity.)[39] This simple, common dialectic rests on fixing the opposition of **21.91** being and nothing. That a beginning of the world or of anything is not possible is proven as follows:

Nothing can begin, either in so far as something is, or in so far as it is not; for in so far as it is, it does not begin to be; and in so far as it is not, it also does not begin to be. – If the world, or anything, had begun, it would have begun in nothing; but in nothing there is no beginning – or nothing is not a beginning; for a beginning implies a being, but nothing contains no being. Nothing is only nothing. In a ground, a cause, and so on, if this is how nothing is determined, there is contained an affirmation, being. – For the same reason, too, something cannot cease to be. For then it would have to contain nothing, but being is only being, not the opposite of itself.

It is clear that in this proof there is nothing brought against becoming, or beginning and ceasing-to-be, against this unity of being and nothing, except an assertorical denial and the ascription of truth to being and nothing taken in separation each from the other. – Such a dialectic is however at least more consistent than ordinary reflective thought. This thought accepts as the whole truth that being and nothing are only in separation, yet allows on the other hand for a beginning and a ceasing-to-be that are equally accepted as true determinations; in these, however, it in fact assumes the inseparability of being and nothing.

Once we presuppose that being and nothing are absolutely divorced, beginning or becoming, as we often hear said, is of course *incomprehensible*, for we make a presupposition which does away with beginning or becoming and yet *again* admits it. And this contradiction, which we create ourselves and make impossible to resolve, this is what is called the *incomprehensible*.

The dialectic just cited is also the same as the understanding deploys against the concept of *infinitesimal* magnitude given by higher analysis. More will be said below about this concept.[40] – These magnitudes are so determined that they *are in their vanishing* – not *before* this vanishing, for they would then be finite magnitudes; not *after* it, for then they would be **21.92** nothing. Against this pure thought, it is objected and endlessly repeated that these magnitudes are *either* something *or nothing*; that there is no *intermediary state* between being and nothing ("state" is here an inappropriate,

[39] See below, 21.228–232. [40] See below, 21.252–253.

barbaric expression). – Assumed here is again the absolute separation of being and nothing. But we have shown against this that being and nothing are in fact the same, or to speak in the language cited, that there *is* nothing which is not an *intermediary state between being and nothing*. Mathematics owes its most brilliant successes to precisely that determination which the understanding rejects.

This form of argumentation that falsely presupposes the absolute separation of being and nothing, and insists on it, should be called not *dialectic* but *sophistry*. For sophistry is an argumentation derived from a baseless presupposition rashly accepted without critique; but we call dialectic the higher rational movement in which these, being and nothing, apparently utterly separated, pass over into each other on their own, by virtue of what they are, and the presupposition sublates itself. It is the dialectical immanent nature of being and nothing themselves to manifest their unity, which is becoming, as their truth.

2. The moments of becoming

Becoming is the unseparatedness of being and nothing, not the unity that abstracts from being and nothing; as the unity *of being and nothing* it is rather this *determinate* unity, or one in which being and nothing equally *are*. However, inasmuch as being and nothing are each unseparated from its other, *each is not*. In this unity, therefore, *they are*, but as vanishing, only as *sublated*. They sink from their initially represented *self-subsistence* into
21.93 moments which are *still distinguished* but at the same time sublated.

Grasped as thus distinguished, each is in their *distinguishedness* a unity with the *other*. Becoming thus contains being and nothing as *two such unities*, each of which is itself unity of being and nothing; the one is being as immediate and as reference to nothing; the other is nothing as immediate and as reference to being; in these unities the determinations are of unequal value.

Becoming is in this way doubly determined. In one determination, nothing is the immediate, that is, the determination begins with nothing and this refers to being; that is to say, it passes over into it. In the other determination, being is the immediate, that is, the determination begins with being and this passes over into nothing – *coming-to-be* and *ceasing-to-be*.

Both are the same, becoming, and even as directions that are so different they interpenetrate and paralyze each other. The one is *ceasing-to-be*; being passes over into nothing, but nothing is just as much the opposite of

itself, the passing-over into being, coming-to-be. This coming-to-be is the other direction; nothing goes over into being, but being equally sublates itself and is rather the passing-over into nothing; it is ceasing-to-be. – They do not sublate themselves reciprocally – the one sublating the other externally – but each rather sublates itself in itself and is within it the opposite of itself.

3. Sublation of becoming

The equilibrium in which coming-to-be and ceasing-to-be are poised is in the first place becoming itself. But this becoming equally collects itself in *quiescent unity*. Being and nothing are in it only as vanishing; becoming itself, however, is only by virtue of their being distinguished. Their vanishing is therefore the vanishing of becoming, or the vanishing of the vanishing itself. Becoming is a ceaseless unrest that collapses into a quiescent result.

This can also be expressed thus: becoming is the vanishing of being into nothing, and of nothing into being, and the vanishing of being and nothing in general; but at the same time it rests on their being distinct. It therefore contradicts itself in itself, because what it unites within itself is **21.94** self-opposed; but such a union destroys itself.

This result is a vanishedness, but it is not *nothing*; as such, it would be only a relapse into one of the already sublated determinations and not the result of nothing *and of being*. It is the unity of being and nothing that has become quiescent simplicity. But this quiescent simplicity is *being*, yet no longer for itself but as determination of the whole.

Becoming, as transition into the unity of being and nothing, a unity which is as existent or has the shape of the one-sided *immediate* unity of these moments, is *existence*.

Remark

To sublate and *being sublated* (the *idealized*) constitute one of the most important concepts of philosophy. It is a fundamental determination that repeatedly occurs everywhere in it, the meaning of which must be grasped with precision and especially distinguished from *nothing*. – What is sublated does not thereby turn into nothing. Nothing is the *immediate*; something sublated is on the contrary something *mediated*; it is something non-existent but as a result that has proceeded from a being; it still *has in itself*, therefore, the *determinateness from which it derives*.

The German "*aufheben*" ("to sublate" in English) has a twofold meaning in the language: it equally means "*to keep*," "to 'preserve'," and "to cause

to cease," "*to put an end to*." Even "to preserve" already includes a negative note, namely that something, in order to be retained, is removed from its immediacy and hence from an existence which is open to external influences. – That which is sublated is thus something at the same time preserved, something that has lost its immediacy but has not come to nothing for that. – These two definitions of "to sublate" can be cited as two dictionary *meanings* of the word. But it must strike one as remarkable that a language has come to use one and the same word for two opposite meanings. For speculative thought it is gratifying to find words that have in themselves a speculative meaning. The German language has several
21.95 such words. The double meaning of the Latin "*tollere*" (made notorious by Cicero's quip, "*tollendum est Octavium*")[41] does not go as far; its affirmative determination only goes so far as "lifting up." Something is sublated only in so far as it has entered into unity with its opposite; in this closer determination as something reflected, it may fittingly be called a *moment*. In the case of the lever, "*weight*" and "*distance* from a point" are called its mechanical *moments* because of the *sameness* of their effect, in spite of the difference between something real like weight, and something idealized such as the merely spatial determination of "line." (See *Encycl. of the Phil. Sc.*, 3rd edn, §261, Remark.) – We shall often not help but observe that the technical language of philosophy uses Latin terms for reflected determinations, either because the mother tongue has no terms for them, or, if it has as it does here, because in expressing them it is more likely to call to mind the immediate, whereas the foreign tongue recalls the reflected.

The more precise sense and precise expression that being and nothing receive now that they are *moments* will have to transpire from the consideration of existence, the unity in which they are preserved. Being is being, and nothing is nothing, only as held distinct from each other; in their truth, however, in their unity, they have vanished as such determinations and are now something else. Being and nothing are the same and, *precisely because they are the same, they no longer are being and nothing* but possess a different determination; in becoming they were coming-to-be and ceasing-to-be; in existence, which is another determinate unity, they are again moments but differently determined. This unity now remains their base from which they
21.96 no longer surface in the abstract meaning of being and nothing.

[41] "Caesar [Octavianus], he says, made no complaints against you to be sure, except as to a remark which he attributed to you: 'the young man must be praised, honoured, and lifted up [*tollendum*].'" Brutus (2001), Letter 401, to Cicero, p. 307. *Tollendum* can also be translated as "immortalized." Of course, to be made into a god one must die first.

CHAPTER 2

Existence

Existence is *determinate* being; its determinateness is *existent* determinateness, *quality*. Through its quality, *something* is opposed to an *other*; it is *alterable* and *finite*, negatively determined not only towards an other, but absolutely within it. This negation in it, in contrast at first with the finite something, is the *infinite*; the abstract opposition in which these determinations appear resolves itself into oppositionless infinity, into *being-for-itself*.

The treatment of existence is therefore in three divisions:

A. existence as such
B. something and other, finitude
C. qualitative infinity.

A. EXISTENCE AS SUCH

In existence (a) *as such*, its determinateness is first (b) to be distinguished as *quality*. The latter, however, is to be taken in both the two determinations of existence as *reality* and *negation*. In these determinacies, however, existence is equally reflected into itself, and, as so reflected, it is posited as (c) *something*, an existent. **21.97**

a. Existence in general

Existence proceeds from becoming. It is the simple oneness of being and nothing. On account of this simplicity, it has the form of an *immediate*. Its mediation, the becoming, lies behind it; it has sublated itself, and existence therefore appears as a first from which the forward move is made. It is at first in the one-sided determination of *being*; the other determination which it contains, *nothing*, will likewise come up in it, in contrast to the first.

It is not mere being but *existence*, or *Dasein* [in German]; according to its [German] etymology, it is being (*Sein*) in a certain *place* (*da*). But the

representation of space does not belong here. As it follows upon becoming, existence is in general *being* with a *non-being*, so that this non-being is taken up into simple unity with being. *Non-being* thus taken up into being with the result that the concrete whole is in the form of being, of immediacy, constitutes *determinateness* as such.

The *whole* is likewise in the form or *determinateness* of being, since in becoming being has likewise shown itself to be only a moment – something sublated, negatively determined. It is such, however, *for us*, *in our reflection*; not yet as *posited* in it. What is posited, however, is the determinateness as such of existence, as is also expressed by the *da* (or "there") of the *Dasein*. – The two are always to be clearly distinguished. Only that which is *posited* in a concept belongs in the course of the elaboration of the latter to its content. Any determinateness not yet posited in the concept itself belongs instead to our reflection, whether this reflection is directed to the nature of the concept itself or is a matter of external comparison. To remark on a determinateness of this last kind can only be for the clarification or anticipation of the whole that will transpire in the course of the development itself. That the whole, the unity of being and nothing, is in the *one-sided determinateness* of being is an external reflection; but in negation, in something and *other*, and so forth, it will become *posited*. – It was necessary here to call attention to the distinction just given; but to comment on all that reflection can allow itself, to give an account of it, would lead to a long-winded anticipation of what must transpire in the fact itself. Although such reflections may serve to facilitate a general overview and thus facilitate understanding, they also bring the disadvantage of being seen as unjustified assertions,
21.98 unjustified grounds and foundations, of what is to follow. They should be taken for no more than what they are supposed to be and should be distinguished from what constitutes a moment in the advance of the fact itself.

Existence corresponds to *being* in the preceding sphere. But being is the indeterminate; there are no determinations that therefore transpire in it. But existence is determinate being, *something concrete*; consequently, several determinations, several distinct relations of its moments, immediately emerge in it.

b. Quality

On account of the immediacy with which being and nothing are one in existence, neither oversteps the other; to the extent that existence is existent, to that extent it is non-being; it is determined. Being is not the *universal*,

determinateness not the *particular*.[42] Determinateness *has yet to detach itself* from *being*; nor will it ever detach itself from it, since the now underlying truth is the unity of non-being with being; all further determinations will transpire on this basis. But the connection which determinateness now has with being is one of the immediate unity of the two, so that as yet no differentiation between the two is posited.

Determinateness thus isolated by itself, as *existent* determinateness, is *quality* – something totally simple, immediate. *Determinateness* in general is the more universal which, further determined, can be something quantitative as well. On account of this simplicity, there is nothing further to say about quality as such.

Existence, however, in which nothing and being are equally contained, is itself the measure of the one-sidedness of quality as an only *immediate* or *existent* determinateness. Quality is equally to be posited in the determination of nothing, and the result is that the immediate or existent determinateness is posited as distinct, reflected, and the nothing, as thus the determinate element of determinateness, will equally be something reflected, a *negation*. Quality, in the distinct value of *existent*, is *reality*; when affected by a negating, it is *negation* in general, still a quality but one that counts as a lack and is further determined as limit, restriction. **21.99**

Both are an existence, but in *reality*, as quality with the accent on being an existent, that it is determinateness and hence also negation is concealed; reality only has, therefore, the value of something positive from which negating, restriction, lack, are excluded. Negation, for its part, taken as mere lack, would be what nothing is; but it is an existence, a quality, only determined with a non-being.

Remark

Reality may seem to be an ambiguous word, since it is used in different, even opposite determinations. In philosophical usage, for instance, one speaks of *mere empirical* reality as of a worthless being. But when it is said of thoughts, concepts, theories, that they *have no reality*, this means that there is no *actuality* to them. Of the idea of a Platonic republic, for instance, it is said that it might well be true *in itself* or in its concept. Here the idea is not denied its value and is even allowed room *alongside* reality. However, as against the so-called *mere* ideas, the *mere* concepts, "the real" counts as alone true. – The sense in which external existence is made the criterion of the truth of a content is for its part just as one-sided as when

[42] This will happen in the Subjective Logic, when the logical object assumes the form of "concept."

the idea, the essence, or even inner feeling, is represented as indifferent to external existence and is even held to be all the more estimable the more remote it is from reality.

In connection with the term "reality," mention must be made of the former metaphysical *concept of God* that was once made the foundation of the so-called ontological proof of God's existence.[43] God was defined as *the sum-total of all realities*, and of this sum-total it was said that it contained no contradiction within, that none of the realities canceled any other, for a reality is to be taken only as a perfection, as *something affirmative* that contains no negation. Consequently, as it was said, the realities are not in opposition and do not contradict one another.

21.100 On this concept of reality, the assumption is that the latter still remains after all negation has been thought away; however, to do this is to remove all determinateness from reality. Reality is quality, existence; it therefore contains the moment of the negative and is the determinate being that it is only through it. Taken in the so-called *eminent sense*, or as *infinite* in the ordinary meaning of the word – as we are said we should – reality is expanded into indeterminateness and loses its meaning. God's goodness is supposed to be such not in the ordinary sense but eminently; it is not different from justice but is rather *tempered* by it (an expression of mediation of Leibnizian origin)[44] just as contrariwise justice is tempered by goodness; and so neither is goodness goodness any longer, nor justice justice. Power should be tempered by wisdom – but is then no longer power as such, for it is subject to wisdom. – Wisdom should be expanded into power, but then it vanishes as end and measure setting wisdom. The true concept of the infinite and of its *absolute* unity that will later emerge[45] is not to be understood as a *tempering*, *a mutual restricting* or *blending* – a superficial, nebulous connection that can only satisfy mindless representation. – When reality, taken in the sense of a determinate quality as in the said definition of God, is made to transgress its determinateness, it ceases to be reality; it becomes abstract being; God as the *pure* reality in all realities, or as the *sum-total* of all realities, is the same empty absolute, void of determination and content, in which all is one.

If, on the contrary, reality is taken in its determinateness, then, since it essentially contains the moment of the negative, the sum-total of all realities becomes just as much a sum-total of all negations, the sum-total

[43] "The most perfect being is defined as one in which all co-possible realities inhere in the absolutely highest degree." Christian Wolff, *Theologia naturalis methodo scientifica pertractata* (Frankfurt and Leipzig, 1741), §6.

[44] Leibniz, *Monadology* (1714), §41. [45] Cf. below, 21.130–37.

of all contradictions, a sort of first absolute *power* in which everything determinate is absorbed. However, since reality only exists in so far as it still has over against it something which it has not sublated, by being thought expanded in this way into an accomplished power void of restrictions, it becomes the abstract nothing. The said reality in everything real, the *being* in all existence that should express the concept of God, is nothing else than abstract being, the same as nothing. **21.101**

That determinateness is negation posited as affirmative is Spinoza's proposition: *omnis determinatio est negatio*,[46] a proposition of infinite importance. Only, negation as such is formless abstraction. However, speculative philosophy must not be accused of taking negation or nothing as an ultimate: negation is as little an ultimate for it as reality is for it the truth.

The unity of Spinoza's substance, or that there is only one substance, is the necessary consequence of this proposition, that determinateness is negation. Spinoza had of necessity to posit *thought* and *being* or extension, the two determinations, namely, which he had before him, as one in this unity,[47] for as determinate realities the two are negations whose infinity is their unity;[48] according to Spinoza's definition, about which more later on,[49] the infinity of something is its affirmation. He therefore conceived them as attributes, that is, such as do not have a particular subsistence, a being-in-and-for-itself, but only are as sublated as moments; or rather, since substance is the total void of internal determinateness, they are not even moments; the attributes, like the modes, are distinctions made by an external understanding. – Also the substantiality of individuals cannot hold its own before that substance. The individual refers to itself by setting limits to every other; but these limits are therefore also the limits of its self; they are references to the other; the individual's existence is not in the individual. True, the individual is *more* than just restrictions on all sides; but this *more* belongs to another sphere, that of the concept; in the metaphysics of being, the individual is an absolutely determinate something; and against this something, against this finite that would be in and for itself as such, determinateness asserts itself essentially as negation, dragging it into the same negative movement of the understanding that makes everything vanish into the abstract unity of substance.

Negation stands immediately over against reality; further on, in the sphere proper to reflected determinations, it will be opposed to the *positive*, **21.102**

[46] Letter 50 (1674) to Jarig Jellis. *Works of Spinoza*, trans. R. H. M. Elwes (New York: Dover, 1951), Vol. II, pp. 369–370.
[47] *Ethics*, Part 2, Prop. 1, 2. [48] *Ethics*, Part I, Prop. 8, note 1. [49] Cf. below, 21.139.

which is reality reflecting upon negation – the reality in which the negative, still hiding in reality as such, shines forth.[50]

Quality specifically is a *property* only when, in an *external connection*, it manifests itself as an *immanent determination*. By properties of herbs, for instance, we understand determinations which are not just *proper* to a something but are such that, in virtue of them, the something *holds its own* while referring to others and will not give in to the alien influences posited in it by them; on the contrary, it *imposes* its own determinations in the other – though it does not keep it at a distance. On the other hand, more stable determinacies such as figure or shape are not called properties, nor even qualities, for they are thought of as alterable and therefore as not identical with *being*.

"*Qualierung*" or "*Inqualierung*," an expression of Jacob Boehme's profound but also profoundly turbid philosophy, signifies the movement within a quality (sourness, bitterness, fieriness, etc.) inasmuch as in its negative nature (in its *Qual* or torment) the quality posits itself, securing itself from another; it signifies in general the internal unrest of quality by which it produces and preserves itself only in conflict.[51]

c. Something

In existence its determinateness has been distinguished as quality; in this quality as something existing, the distinction *exists* – the distinction of reality and negation. Now though these distinctions are present in existence, they are just as much null and sublated. Reality itself contains negation; it is existence, not indeterminate or abstract being. Negation is for its part equally existence, not the supposed abstract nothing but posited here as it
21.103 is in itself, as existent, as belonging to existence. Thus quality is in general unseparated from existence, and the latter is only determinate, qualitative being.

This sublating of the distinction is more than the mere retraction and external re-omission of it, or a simple return to the simple beginning, to existence as such. The distinction cannot be left out, for it *is*. Therefore, what *de facto* is at hand is this: existence in general, distinction in it, and the sublation of this distinction; the existence, not void of distinctions as at the

[50] Cf. below 11.273ff.

[51] For mention of *Inqualierung*, see Böhme, *Sämtliche Schriften*, Vol. I, *Aurora, oder Morgenröthe im Aufgang*, ed. August Faust and Will-Erich Peuckert (Stuttgart: Fr. Frommanns, 1955), chapter 13, §40. Böhme refers to these specific qualities mentioned by Hegel in chapter 4, §6 of the same text. (This text is a facsimile of the edition from 1730 in 11 volumes.)

beginning, but as *again* self-equal *through the sublation of the distinction*; the simplicity of existence *mediated* through this sublation. This state of sublation of the distinction is existence's own determinateness; existence is thus *being-in-itself*; it is *existent*, *something*.

Something is the *first negation of negation*, as simple existent self-reference. Existence, life, thought, and so forth, essentially take on the determination of an existent being, a living thing, a thinking mind ("I"), and so forth. This determination is of the highest importance if we do not wish to halt at existence, life, thought, and so forth, as generalities – also not at *Godhood* (instead of God). In common representation, *something* rightly carries the connotation of *a real thing*. Yet it still is a very superficial determination, just as *reality* and *negation*, existence and its determinateness, though no longer the empty being and nothing, still are quite abstract determinations. For this reason they also are the most common expressions, and a reflection that is still philosophically unschooled uses them the most; it casts its distinctions in them, fancying that in them it has something really well and firmly determined. – As *something*, the negative of the negative is only the beginning of the subject – its in-itselfness is still quite indeterminate. It determines itself further on, at first as *existent-for-itself* and so on, until it finally obtains in the concept the intensity of the subject. At the base of all these determinations there lies the negative unity with itself. In all this, however, care must be taken to distinguish the *first* negation, negation as negation *in general*, from the second negation, the negation of negation which is concrete, *absolute* negativity, just as the first is on the contrary only *abstract* negativity.

Something is an *existent* as the negation of negation, for such a negation is the restoration of the simple reference to itself – but the something is thereby equally the *mediation of itself with itself*. Present in the simplicity of something, and then with greater determinateness in being-for-itself, in the subject, and so forth, this mediation of itself with itself is also already present in becoming, but only as totally abstract mediation; mediation with *itself* is *posited* in the something in so far as the latter is determined as **21.104**
a simple *identity*. – Attention can be drawn to the presence of mediation in general, as against the principle of the alleged bare immediacy of a knowledge from which mediation should be excluded. But there is no further need to draw particular attention to the moment of mediation, since it is to be found everywhere and on all sides, in every concept.

This mediation with itself which something is *in itself*, when taken only as the negation of negation, has no concrete determinations for its sides; thus it collapses into the simple unity which is *being*. Something *is*, and

is therefore also an existent. Further, it is *in itself* also *becoming*, but a becoming that no longer has only being and nothing for its moments. One of these moments, being, is now existence and further an existent. The other moment is equally an existent, but determined as the negative of something – an *other*. As becoming, something is a transition, the moments of which are themselves something, and for that reason it is an *alteration* – a becoming that has already become *concrete*. – At first, however, something alters only in its concept; it is not yet *posited* in this way, as mediated and mediating, but at first only as maintaining itself simply in its reference to itself; and its negative is posited as equally qualitative, as only an *other* in general.

B. FINITUDE

(a) Something and other: at first they are indifferent to one another; an other is also an immediate existent, a something; the negation thus falls outside both. Something is *in itself* in contrast to its *being-for-other*. But the determinateness belongs also to its *in-itself*, and
(b) the *determination* of this in-itself in turn passes over into *constitution*, and this latter, as identical with determination, constitutes the immanent and at the same time negated being-for-another, the *limit* of something which
(c) is the immanent determination of the something itself, and the something thus is the *finite*.

In the first division where *existence* in general was considered, this existence had, as at first taken up, the determination of *an existent*. The moments of its development, quality and something, are therefore of equally affirmative determination. The present division, on the contrary,
21.105 develops the negative determination which is present in existence and was there from the start only as negation in general. It was then the *first* negation but has now been determined to the point of the *being-in-itself* of the something, the point of the negation of negation.

a. Something and an other

1. Something and other are, first, both *existents* or *something*.

Second, each is equally an *other*. It is indifferent which is named first, and just for this reason it is named *something* (in Latin, when they occur in a proposition, both are *aliud*, or "the one, the other," *alius alium*; in the case of an alternating relation, the analogous expression is *alter alterum*).

If of two beings we call the one A and the other B, the B is the one which is first determined as other. But the A is just as much the other of the B. Both are *other* in the same way. "This" serves to fix the distinction and the something which is to be taken in the affirmative sense. But "this" also expresses the fact that the distinction, and the privileging of one something, is a subjective designation that falls outside the something itself. The whole determinateness falls on the side of this external pointing; also the expression "*this*" contains no distinctions; each and every something is just as good a "this" as any other. By "this" we *mean* to express something completely determinate, overlooking the fact that language, as a work of the understanding, only expresses the universal, albeit *naming* it as a single object. But an individual name is something meaningless in the sense that it does not express a universal. It appears as something merely posited and arbitrary for the same reason that proper names can also be arbitrarily picked, arbitrarily given as well as arbitrarily altered.[52]

Otherness thus appears as a determination alien to the existence thus pointed at, or the other existence as *outside* this one existence, partly because the one existence is determined as other only by *being compared* by a Third, and partly because it is so determined only on account of the other which is outside it, but is not an other for itself. At the same time, as has been remarked, even for ordinary thinking every existence equally determines itself as an other existence, so that there is no existence that remains determined simply as an existence, none which is not outside an existence and therefore is not itself an other. **21.106**

Both are determined as *something* as well as *other*: thus they are *the same* and there is as yet no distinction present in them. But this *sameness* of determinations, too, falls only within external reflection, in the comparison of the two; but the *other*, as posited at first, though an other with reference to something, is other also *for itself apart from the something*.

Third, the *other* is therefore to be taken in isolation, with reference to itself, has to be taken *abstractly* as the other, the τὸ ἕτερον of Plato who opposes it to the one as a moment of totality, and in this way ascribes to *the other* a *nature* of its own. Thus the *other*, taken solely as such, is not the other of something, but is the other within, that is, the other of itself. – Such an other, which is the other by its own determination, is *physical nature*; nature is the *other of spirit*; this, its determination, is at first a mere relativity expressing not a quality of nature itself but only a reference external to it. But since spirit is the true something, and hence nature is

[52] Hegel is repeating the argument of Chapter 1 of the *Phenomenology of Spirit*.

what it is within only in contrast to spirit, taken for itself the quality of nature is just this, to be the other within, that *which-exists-outside-itself* (in the determinations of space, time, matter).

The other which is such for itself is the other within it, hence the other of itself and so the other of the other – therefore, the absolutely unequal in itself, that which negates itself, *alters* itself. But it equally remains identical with itself, for that into which it alters is the *other*, and this other has no additional determination; but that which alters itself is not determined in any other way than in this, to be an other; in *going over* to this other, it *only unites with itself*. It is thus posited as reflected into itself with sublation of the otherness, a self-*identical* something from which the otherness, which is at the same time a moment of it, is therefore distinct, itself not appertaining to it as something.

2. The something *preserves* itself in its non-being; it is essentially *one* with it, and essentially *not one* with it. It therefore stands in *reference* to an otherness without being just this otherness. The otherness is at once contained in it and yet *separated* from it; it is *being-for-other*.

Existence as such is an immediate, bare of references; or, it is in the determination of *being*. However, as including non-being within itself, existence is *determinate* being, being negated within itself, and then in the first instance an other – but, since in being negated it preserves itself at the
21.107 same time, it is only *being-for-other*.

It preserves itself in its non-being and is being; not, however, being in general but being with reference to itself *in contrast* to its reference to the other, as self-equality in contrast to its inequality. Such a being is *being-in-itself*.

Being-for-other and being-in-itself constitute the *two moments* of something. There are here *two pairs* of determinations: (1) *something* and *other*; (2) *being-for-other* and *being-in-itself*. The former contain the non-connectedness of their determinateness; something and other fall apart. But their truth is their connection; being-for-other and being-in-itself are therefore the same determinations posited as *moments* of one and the same unity, as determinations which are connections and which, in their unity, remain in the unity of existence. Each thus itself contains within it, at the same time, also the moment diverse from it.

Being and nothing in their unity, which is existence, are no longer being and nothing (these they are only outside their unity); so in their restless unity, in becoming, they are coming-to-be and ceasing-to-be. – In the something, being is *being-in-itself*. Now, as self-reference, self-equality, being is no longer immediately, but is self-reference only as the non-being

of otherness (as existence reflected into itself). – The same goes for non-being: as the moment of something in this unity of being and non-being: it is not non-existence in general but is the other, and more determinedly – according as being is at the same time *distinguished* from it – it is *reference* to its non-existence, being-for-other.

Hence *being-in-itself* is, first, negative reference to non-existence; it has otherness outside it and is opposed to it; in so far as something is *in itself*, it is withdrawn from being-other and being-for-other. But, second, it has non-being also right in it; for it *is* itself *the non-being* of being-for-other. **21.108**

But being-for-other is, first, the negation of the simple reference of being to itself which, in the first place, is supposed to be existence and something; in so far as something is in an other or for an other, it lacks a being of its own. But, second, it is not non-existence as pure nothing; it is non-existence that points to being-in-itself as its being reflected into itself, just as conversely the being-in-itself points to being-for-other.

3. Both moments are determinations of one and the same, namely of something. Something is *in-itself* in so far as it has returned from the being-for-other back to itself. But something has also a determination or circumstance, whether *in itself* (here the accent is on the *in*) or *in it*; in so far as this circumstance is *in it* externally, it is a being-for-other.

This leads to a further determination. *Being-in-itself* and being-for-other are different at first. But that something also has *in it what it is in itself* and conversely is in itself also what it is as being-for-other – this is the identity of being-in-itself and being-for-other, in accordance with the determination that the something is itself one and the same something of both moments, and these are in it, therefore, undivided. – This identity already occurs formally in the sphere of existence, but more explicitly in the treatment of essence and later of the relations of *interiority* and *externality*, and in the most determinate form in the treatment of the idea, as the unity of concept and actuality. – Opinion has it that with the *in-itself* something lofty is being said, as with the *inner*; but what something is *only in itself*, is also *only in it*; in-itself is a merely abstract, and hence itself external determination. The expressions: there is nothing *in it*, or there is something *in it*, imply, though somewhat obscurely, that what is *in a thing* also pertains to its *in-itselfness*, to its inner, true worth.

It may be observed that here we have the meaning of the *thing-in-itself*. It is a very simple abstraction, though it was for a while a very important determination, something sophisticated, as it were, just as the proposition that we know nothing of what things are in themselves was a much valued **21.109** piece of wisdom. – Things are called "in-themselves" in so far as abstraction

is made from all being-for-other, which really means, in so far as they are thought without all determination, as nothing. In this sense, of course, it is impossible to know *what* the thing-in-itself is. For the question "*what?*" calls for determinations to be produced; but since the things of which the determinations are called for are at the same time presumed to be *things-in-themselves*, which means precisely without determination, the impossibility of an answer is thoughtlessly implanted in the question, or else a senseless answer is given. – The thing-in-itself is the same as that absolute of which nothing is known except that in it all is one. What there is *in* these things-in-themselves is therefore very well known; they are as such nothing but empty abstractions void of truth. What, however, the thing-in-itself in truth is, what there basically is in it, of this the Logic is the exposition. But in this Logic something better is understood by the *in-itself* than an abstraction, namely, what something is in its concept; but this concept is in itself concrete: as concept, in principle conceptually graspable; and, as determined and as the connected whole of its determinations, inherently cognizable.

Being-in-itself has at first the being-for-other as a moment standing over against it. But *positedness* also comes to be positioned over against it, and, although in this expression being-for-other is also included, the expression still contains the determination of the bending back, which has already occurred, of that which is not in itself into that wherein it is *positive*, and this is its being-in-itself. *Being-in-itself* is normally to be taken as an abstract way of expressing the concept; *positing*, strictly speaking, first occurs in the sphere of essence, of objective reflection; the ground *posits* that which is grounded through it; more strongly, the cause *produces* an *effect*, an existence whose subsistence is *immediately* negated and which carries the meaning that it has its *substance*, its being, in an other. In the sphere of being, existence only *emerges* out of becoming. Or again, with the something an other is posited; with the finite, an infinite; but the finite does not bring forth the infinite, does not *posit* it. In the sphere of being, the *self-determining* of the concept is at first only *in itself or implicit*, and for that reason it is called a transition or passing over. And the reflecting determinations of being, such as something and other, or finite and infinite, although they essentially point to one another, or are as being-for-other, also stand on their own *qualitatively*; the *other exists*; the finite, like the infinite, is equally to be regarded as *an immediate existent* that stands firm
21.110 on its own; the meaning of each appears complete even without its other. The positive and the negative, on the contrary, cause and effect, however much they are taken in isolation, have at the same time no meaning each

without the other; their *reflective shining* in each other, the shine in each of its other, is present *right in them*. – In the different cycles of determination and especially in the progress of the exposition, or, more precisely, in the progress of the concept in the exposition of itself, it is of capital concern always to clearly distinguish what still *is in itself or implicitly* and what *is posited*, how determinations are in the concept and how they are as posited or as existing-for-other. This is a distinction that belongs only to the dialectical development and one unknown to metaphysical philosophizing (to which the critical also belongs); the definitions of metaphysics, like its presuppositions, distinctions, and conclusions, are meant to assert and produce only the *existent* and that, too, as *existent-in-itself*.

In the unity of the something with itself, *being-for-other* is identical with its *in-itself*; the being-for-other is thus *in* the something. The determinateness thus reflected into itself is therefore again *a simple existent* and hence again a quality – *determination*.

b. Determination,[53] *constitution, and limit*

The *in-itself*, in which the something is reflected into itself from its being-for-other, no longer is an abstract in-itself but, as the negation of its being-for-other, is mediated through this latter, which is thus its moment. It is not only the immediate identity of the something with itself, but the identity by virtue of which the something also has *present in it* what it is *in itself*; the being-for-other is *present in it* because the *in-itself* is the sublation of it, is in itself *from it*; but, because it is still abstract, and therefore essentially affected with negation, it is equally affected with being-for-other. We have here not only quality and reality, existent determinateness, but determinateness *existent-in-itself*; and the development consists in *positing* such determinateness as thus immanently reflected.

1. The quality which in the simple something is an in-itself essentially in unity with the something's other moment, its *being-in-it*, can be named its *determination*, provided that this word is distinguished, in a more precise signification, from *determinateness* in general. Determination is affirmative determinateness; it is the in-itself by which a something abides in its existence while involved with an other that would determine it, by which it preserves itself in its self-equality, holding on to it in its being-for- **21.III**
other. Something *fulfills* its determination to the extent that the further

[53] *Bestimmung* also carries the meaning of "vocation" or "destiny" as in "*die Bestimmung des Menschen*," the vocation of humankind.

determinateness, which variously accrues to it in the measure of its being-in-itself as it relates to an other, becomes its filling. Determination implies that what something is *in itself* is also *present in it*.

The *determination of the human being*, its vocation, is rational thought: thinking in general is his simple *determinateness*; by it the human being is distinguished from the brute; he is thinking *in himself*, in so far as this thinking is distinguished also from his being-for-other, from his own natural and sensuous being that brings him in immediate association with the other. But thinking is also *in him*; the human being is himself thinking, he *exists* as thinking, thought is his concrete existence and actuality; and, further, since thinking is in his existence and his existence is in his thinking, thinking is *concrete*, must be taken as having content and filling; it is rational thought and as such the *determination* of the human being. But even this determination is again only *in itself*, as an *ought*, that is to say, it is, together with the filling embodied in its in-itself, in the form of an in-itself in general *as against* the existence which is not embodied in it but still lies outside confronting it, immediate sensibility and nature.

2. The filling of the being-in-itself with determinateness is also distinct from the determinateness which is only being-for-other and remains outside the determination. For in the sphere of the qualitative, the distinguished terms are left, in their sublated being, also with an immediate, qualitative being contrasting them. That which the something has *in it* thus separates itself and is from this side the external existence of the something and also *its* existence, but not as belonging to its being-in-itself. – Determinateness is thus *constitution*.

Constituted in this or that way, the something is caught up in external influences and in external relationships. This external connection on which the constitution depends, and the being determined through an other, appear as something accidental. But it is the quality of the something to be given over to this externality and to have a *constitution*.

In so far as something alters, the alteration falls on the side of its con-
21.112 stitution; the latter is that *in the something* which becomes an other. The something itself preserves itself in the alteration; the latter affects only this unstable surface of the something's otherness, not its determination.

Determination and constitution are thus distinct from each other; something, according to its determination, is indifferent to its constitution. But that which the something has *in it* is the middle term of this syllogism connecting the two, determination and constitution. Or, rather, the *being-in-the-something* showed itself to fall apart into these two extremes. The simple middle term is *determinateness* as such; its identity belongs to

determination just as well as to constitution. But determination passes over into constitution on its own, and constitution into determination. This is implied in what has been said. The connection, upon closer consideration, is this: in so far as that which something is *in itself* is also *in it*, the something is affected with being-for-other; determination is therefore open, as such, to the relation with other. Determinateness is at the same time moment, but it contains at the same time the qualitative distinction of being different from *being-in-itself*, of being the negative of the something, another existence. This determinateness which thus holds the other in itself, united with the being-in-itself, introduces otherness in the latter or in determination, and determination is thereby reduced to constitution. – Conversely, the being-for-other, isolated as constitution and posited on its own, is in it the same as what the other as such is, the other in it, that is, the other of itself; but it consequently is *self-referring* existence, thus being-in-itself with a determinateness, therefore determination. – Consequently, inasmuch as the two are also to be held apart, constitution, which appears to be grounded in something external, in an other in general, also *depends* on determination, and the determining from outside is at the same time determined by the something's own immanent determination. And further, constitution belongs to that which something is in itself: something alters along with its constitution.

This altering of something is no longer the first alteration of something merely in accordance with its being-for-other. The first was an alteration only implicitly present, one that belonged to the inner concept; now the alteration is also posited in the something. – The something itself is further determined, and negation is posited as immanent to it, as its developed being-in-itself. **21.113**

The transition of determination and constitution into each other is at first the sublation of their distinction, and existence or something in general is thereby posited; moreover, since this something in general results from a distinction that also includes qualitative otherness within it, there are two somethings. But these are, with respect to each other, not just others in general, so that this negation would still be abstract and would occur only in the comparison of the two; rather the negation now is *immanent* to the somethings. As *existing*, they are indifferent to each other, but this, their affirmation, is no longer immediate: each refers itself to itself *through the intermediary* of the sublation of the otherness which in determination is reflected into the in-itselfness.

Something behaves in this way in relation to the other *through itself*; since otherness is posited in it as its own moment, its in-itselfness holds

negation in itself, and it now has its affirmative existence through its intermediary alone. But the other is also qualitatively distinguished from this affirmative existence and is thus posited outside the something. The negation of its other is only the quality of the something, for it is in this sublation of its other that it is something. The other, for its part, truly confronts an existence only with this sublation; it confronts the first something only externally, or, since the two are in fact inherently joined together, that is, according to their concept, their connectedness consists in this, that existence *has passed over* into otherness, something into other; that something is just as much an other as the other is. Now in so far as the in-itselfness is the non-being of the otherness that is contained in it but is at the same time also distinct as existent, something is itself negation, *the ceasing to be of an other in it*; it is posited as behaving negatively in relation to the other and in so doing preserving itself. This other, the in-itselfness of the something as negation of the negation, is the something's *being-in-itself*, and this sublation is as simple negation at the same time *in it*, namely, as its negation of the other something external to it. It is one determinateness of the two somethings that, on the one hand, as negation of the negation, is identical with the in-itselfness of the somethings, and also, on the other hand, since these negations are to each other as other somethings, joins them together of their own accord and, since each negation negates the other, equally separates them. This determinateness is *limit*.

3. *Being-for-other* is indeterminate, affirmative association of something with its other; in limit the *non-being-for-other* is emphasized, the qualitative negation of the other, which is thereby kept out of the something that is reflected into itself. We must see the development of this concept – a development that will rather look like confusion and contradiction. Contradiction immediately raises its head because limit, as an internally reflected negation of something, *ideally* holds in it the moments of something and other, and these, as distinct moments, are at the same time posited in the sphere of existence as *really*, *qualitatively*, *distinct*.

21.114 α. Something is therefore immediate, self-referring existence and at first it has a limit with respect to an other; limit is the non-being of the other, not of the something itself; in limit, something marks the boundary of its other. – But other is itself a something in general. The limit that something has with respect to an other is, therefore, also the limit of the other as a something; it is the limit of this something in virtue of which the something holds the first something as *its other* away from itself, or is a *non-being of that something*. The limit is thus not only the non-being of the other, but of

the one something just as of the other, and consequently of the *something* in general.

But the limit is equally, essentially, the non-being of the other; thus, through its limit, something at the same time *is*. In limiting, something is of course thereby reduced to being limited itself; but, as the ceasing of the other in it, its limit is at the same time itself only the being of the something; *this something is what it is by virtue of it*, has *its quality in it*. – This relation is the external appearance of the fact that limit is simple negation or the *first* negation, whereas the other is, at the same time, the negation of the negation, the in-itselfness of the something.

Something, as an immediate existence, is therefore the limit with respect to another something; but it has this limit *in it* and is something through the mediation of that limit, which is just as much its non-being. The limit is the mediation in virtue of which something and other each *both is and is not*.

β. Now in so far as something in its limit both *is* and *is not*, and these moments are an immediate, qualitative distinction, the non-existence and the existence of the something fall outside each other. Something has its existence *outside* its limit (or, as representation would also have it, *inside* it); in the same way the other, too, since it is something, has it outside it. The limit is the *middle point between* the two at which they leave off. They have existence *beyond* each other, *beyond their limit*; the limit, as the non-being of each, is the other of both.

– It is in accordance with this difference of the something from its limit that the *line* appears as line outside its limit, the point; the *plane* as plane outside the line; the *solid* as solid only outside its limiting plane. – This is the aspect of limit that first occurs to figurative representation (the self-external-being of the concept) and is also most commonly assumed in the context of spatial objects.

γ. But further, something as it is outside the limit, as the unlimited something, is only existence in general. As such, it is not distinguished from its other; it is only existence and, therefore, it and its other have the **21.115** same determination; each is only something in general or each is other; and so both are *the same*. But this, their at first immediate existence, is now posited in them as limit: in it both are what they are, distinct from each other. But it is also equally their *common* distinguishedness, the unity and the distinguishedness of both, just like existence. This double identity of the two, existence and limit, contains this: that something has existence only in limit, and that, since limit and immediate existence are each at the same time the negative of each other, the something, which is now only

in its limit, equally separates itself from itself, points beyond itself to its non-being and declares it to be its being, and so it passes over into it. To apply this to the preceding example, the one determination is this: that something is what it is only in its limit. Therefore, the *point* is the limit of *line*, not because the latter just ceases at the point and has existence outside it; the *line* is the limit of *plane*, not because the plane just ceases at it; and the same goes for the *plane* as the limit of *solid*. Rather, at the point the line also *begins*; the point is its absolute beginning, and if the line is represented as unlimited on both its two sides, or, as is said, as extended to infinity, the point still constitutes its element, just as the line constitutes the element of the plane, and the plane that of the solid. These *limits* are the *principle* of that which they delimit; just as one, for instance, is as hundredth the limit, but also the element, of the whole hundred.

The other determination is the unrest of the something in its limit in which it is immanent, the *contradiction* that propels it beyond itself. Thus the point is this dialectic of itself becoming line; the line, the dialectic of becoming plane; the plane, of becoming total space. A second definition is given of line, plane, and whole space which has the line come to be through the *movement* of the point; the plane through the movement of the line, and so forth. This *movement* of the point, the line, and so forth, is however viewed as something accidental, or as movement only in figurative representation. In fact, however, this view is taken back by supposing that the determinations from which the line, and so forth, originate are their *elements* and *principles*, and these are, at the same time, nothing else but their limits; the coming to be is not considered as accidental or only as represented. That the point, the line, the plane, are *per se* self-contradictory beginnings which on their own repel themselves from themselves, and consequently that the point passes over from itself into the line through
21.116 its concept, *moves in itself* and makes the line come to be, and so on – all this lies in the concept of the limit which is immanent in the something. The application itself, however, belongs to the treatment of space; as an indication of it here, we can say that the point is the totally abstract limit, but *in a determinate existence*; this existence is still taken in total abstraction, it is the so-called absolute, that is, abstract *space*, the absolutely continuous being-outside-one-another. Inasmuch as the limit is not abstract negation, but is rather *in this existence*, inasmuch as it is *spatial* determinateness, the point is spatial, is the contradiction of abstract negation and continuity and is, for that reason, the transition as it occurs and has already occurred into the line, and so forth. And so *there is* no point, just as there is no line or plane.

The something, posited with its immanent limit as the contradiction of itself by virtue of which it is directed and driven out and beyond itself, is the *finite*.

c. Finitude

Existence is determinate. Something has a quality, and in this quality it is not only determined but delimited; its quality is its limit and, affected by it, something remains affirmative, quiescent existence. But, so developed that the opposition of its existence and of the negation as the limit immanent to this existence is the very in-itselfness of the something, and this is thus only becoming in it, this negation constitutes the finitude of the something.

When we say of things that *they are finite*, we understand by this that they not only have a determinateness, that their quality is not only reality and existent determination, that they are not merely limited and as such still have existence outside their limit, but rather that non-being constitutes their nature, their being. Finite things *are*, but in their reference to themselves they refer to themselves *negatively* – in this very self-reference they propel themselves beyond themselves, beyond their being. They *are*, but the truth of this being is (as in Latin) their *finis*, their *end*.[54] The finite does not just alter, as the something in general does, but *perishes*, and its perishing is not just a mere possibility, as if it might be without perishing. Rather, the being as such of finite things is to have the germ of this transgression[55] in their in-itselfness: the hour of their birth is the hour of their death. **21.117**

α. The immediacy of finitude

The thought of the finitude of things brings this mournful note with it because finitude is qualitative negation driven to the extreme, and in the simplicity of such a determination there *is* no longer left to things an affirmative being *distinct* from their determination as things destined to ruin.[56] Because of this qualitative simplicity of negation that has returned to the abstract opposition of nothing and perishing to being, finitude is the most obstinate of the categories of the understanding; negation in

[54] "... (as in Latin) their *finis*..." is my gloss. The Latin root of "finite" and "finitude" is *finis*, that is, "end." This connection between "finite" and "end" is clear in the German, *endlich*, *Endlichkeit*, *Ende*, and Hegel plays on it. I have tried to bring out this wordplay, which in English implicates the Latin word.

[55] *Vergehen* has the meaning of both "offence" (as in "transgression") and "passage of time."

[56] *Bestimmung zum Untergange*. *Bestimmung* means both "determination" and "destiny" or "vocation."

general, constitution, limit, are compatible with their other, with existence; even the abstract nothing, by itself, is given up as an abstraction; but finitude is negation *fixed in itself* and, as such, stands in stark contrast to its affirmative. The finite thus does indeed let itself be submitted to flux; this is precisely what it is, that it should come to an end, and this end is its only determination. Its refusal is rather to let itself be brought affirmatively to its affirmative, the infinite, to be associated with it; it is therefore inseparably posited with its nothing, and thereby cut off from any reconciliation with its other, the affirmative. The determination of finite things does not go past their *end*. The understanding persists in this sorrow of finitude, for it makes non-being the determination of things and, at the same time, this non-being *imperishable* and *absolute*. Their transitoriness would only pass away in their other, in the affirmative; their finitude would then be severed from them; but this finitude is their unalterable quality, that is, their quality which does not pass over into their other, that is, not into the affirmative; *and so finitude is eternal*.

This is a very important consideration. But that the finite is absolute is certainly not a standpoint that any philosophy or outlook, or the understanding, would want to endorse. The opposite is rather expressly present in the assertion of finitude: the finite is the restricted, the perishable, the finite is *only* the finite, not the imperishable; all this is immediately part and parcel of its determination and expression. But all depends on whether in one's view of *finitude* its *being* is insisted on, and the *transitoriness* thus persists, or whether the *transitoriness* and the *perishing perish*. The fact is that this perishing of the perishing does not happen on precisely the view that would make the *perishing* the *final* end of the finite. The official claim is that the finite is incompatible with the infinite and cannot be united with it; that the finite is absolutely opposed to the infinite. Being, absolute being, is ascribed to the infinite. The finite remains held fast over against it as its negative; incapable of union with the infinite, it remains absolute on
21.118 its own side; from the affirmative, from the infinite, it would receive affirmation and thus it would perish; but a union with the infinite is precisely what is declared impossible. If the finite were not to persist over against the infinite but were to perish, its perishing, as just said, would then be the last of it – not its affirmative, which would be only a perishing of the perishing. However, if it is not to perish into the affirmative but its end is rather to be grasped as a *nothing*, then we are back at that first, abstract nothing that itself has long since passed away.

With this nothing, however, which is supposed to be *only* nothing but to which a reflective existence is nevertheless granted in thought, in

representation or in speech, the same contradiction occurs as we have just indicated in connection with the finite, except that in the nothing it just *occurs* but in the finite it is instead *expressed*. In the one case, the contradiction appears as subjective; in the other, the finite is said to *stand in perpetual opposition* to the infinite, in itself to *be* null, and to be *as* null in itself. This is now to be brought to consciousness. The development of the finite will show that, expressly as this contradiction, it collapses internally, but that, in this collapse, it actually resolves the contradiction; it will show that the finite is not just perishable, and that it perishes, but that the perishing, the nothing, is rather not the last of it; that the perishing rather perishes.

β. Restriction and the ought

This contradiction is indeed abstractly present by the very fact that the *something* is finite, or that the finite *is*. But *something* or being is no longer posited abstractly but reflected into itself, and developed as being-in-itself that has determination and constitution in it, or, more determinedly still, in such a way that it has a limit within it; and this limit, as constituting what is immanent to the something and the quality of its being-in-itself, is finitude. It is to be seen what moments are contained in this concept of the finite something.

Determination and constitution arose as *sides* for external reflection, but determination already contained otherness as belonging to the *in-itself* of something. On the one side, the externality of otherness is within the something's own inwardness; on the other side, it remains as otherness distinguished from it; it is still externality as such, but *in* the something. But further, since otherness is determined as *limit*, itself as negation of **21.119**
the negation, the otherness immanent to the something is posited as the connection of the two sides, and the unity of the something with itself (to which both determination and constitution belong) is its reference turned back upon itself, the reference to it of its implicitly existing determination that in it negates its immanent limit. The self-identical in-itself thus refers itself to itself as to its own non-being, but as negation of the negation, as negating that which at the same time retains existence in it, for it is the quality of its in-itselfness. Something's own limit, thus posited by it as a negative which is at the same time essential, is not only limit as such, but *restriction*. But restriction is not alone in being posited as negative; the negation cuts two ways, for that which it posits as negated is *limit*, and limit is in general what is common to something and other, and is also

the determinateness of the *in-itself* of determination as such. This in-itself, consequently, as negative reference to its limit (which is also distinguished from it), as negative reference to itself as restriction, is the *ought*.

In order for the limit that is in every something to be a restriction, the something must at the same time *transcend it* in itself – must refer to it from within *as to a non-existent*. The existence of something lies quietly indifferent, as it were, *alongside* its limit. But the something transcends its limit only in so far as it is the sublatedness of the limit, the negative in-itselfness over against it. And inasmuch as the limit is as restriction in the *determination* itself, the something thereby *transcends itself*.

The ought therefore contains the double determination: *once*, as a determination which has an in-itselfness over against negation; *and again*, as a non-being which, as restriction, is distinguished from the determination but is at the same time itself a determination existing in itself.[57]

The finite has thus determined itself as connecting determination and limit; in this connection, the determination is the *ought* and the limit is the *restriction*. Thus the two are both moments of the finite, and therefore both themselves finite, the ought as well as the restriction. But only restriction is *posited* as the finite; the ought is restricted only in itself, and therefore only
21.120 for us. It is restricted by virtue of its reference to the limit already immanent within it, though this restriction in it is shrouded in in-itselfness, for according to its determinate being, that is, according to its determinateness in contrast to restriction, it is posited as being-in-itself.

What ought to be *is*, and at the same time *is not*. If it *were*, it would not be what merely *ought to be*. The ought has therefore a restriction essentially. This restriction is not anything alien; *that which only* ought to be is *determination* now posited as it is in fact, namely as at the same time only a determinateness.

The being-in-itself of the something is thus reduced in its determination to the *ought* because the very thing that constitutes the something's in-itselfness is, in one and the same respect, as *non-being*; or again, because in the in-itselfness, in the negation of the negation, the said being-in-itself is as one negation (what negates) a unity with the other, and this other, as qualitatively other, is the limit by virtue of which that unity is as *reference*

[57] Hegel is making a deflationary move here. The "ought" is nothing special. It defines explicitly the true relation that obtains between any subject and its predicate. The subject is its predicate while at the same time being distinguished from it. The relation between the two is therefore always one of identity but at a distance. The predicate is what the subject is "destined" or "said" to be. It is important to keep in mind that *Bestimmung* in German means both, "determination" and "destiny" or "vocation."

to it.[58] The restriction of the finite is not anything external, but the finite's own determination is rather also its restriction; and this restriction is both itself and the ought; it is that which is common to both, or rather that in which the two are identical.

But further, as "ought" the finite *transcends* its restriction; the same determinateness which is its negation is also sublated, and is thus its in-itself; its limit is also not its limit.

As *ought* something is thus *elevated above its restriction*, but conversely it has its *restriction* only as *ought*. The two are indivisible. Something has a restriction in so far as it has negation in its determination, and the determination is also the being sublated of the restriction.

Remark

The ought has of late played a major role in philosophy, especially in connection with morality but also in metaphysics in general, as the final and absolute concept of the identity of the in-itself or of *self*-reference, and of *determinateness* or the limit. **21.121**

"*You can because you ought.*"[59] This expression, which is supposed to say a lot, is implied in the concept of the ought. For the ought is the transcendence of restriction; restriction is sublated in it, the in-itself of the ought is thus identical self-reference, and consequently the abstraction of "*being able*." – But, conversely, "*you cannot, even though you ought*" is just as correct. For the restriction as restriction is equally implied in the ought; the one formalism of possibility has in it a reality, a qualitative otherness, that stands opposed to it, and the connection of each to the other is a contradiction, and thus a "cannot" or rather an impossibility.

In the ought the transcendence of finitude, infinity, begins. The ought is that which, in the subsequent development, in accordance with the said impossibility, will display itself as a progress to infinity.

Regarding the form of *restriction* and of the *ought*, two prejudices deserve more detailed criticism. First, *much* is commonly made of the restrictions of thought, of reason, and so forth, and the claim is made that it is *impossible*

[58] This is a very convoluted sentence. Hegel's point seems to be this. A subject is reflectively what it is by negating that its predicate (otherwise qualitatively other than it) is truly an other. The subject *is* that predicate as other; it negates the predicate as a would-be other (i.e. as a negative with respect to it). The subject is therefore reflectively what the predicate is qualitatively (i.e. immediately). It is what the predicate is, but at a distance as it were. Its self-identity (the negation of the negation that constitutes its internal being) is thus modified by carrying a reference to the would-be, qualitatively independent predicate. The latter is what the subject *ought* to be, what it is "destined" or "said" to be.

[59] Cf. A807/B835.

to transcend such restrictions. What is lost track of in this claim is that something is already transcended by the very fact of being determined as a restriction. For a determinateness, a limit, is determined as restriction only in opposition to its other in general, that is, in opposition to *that which is without its restriction*; the other of a restriction is precisely the *beyond* with respect to it. Stone, metal, do not transcend their restriction, for the simple reason that the restriction is not a restriction *for them*. However, with respect to such general propositions that are typical of the way the understanding thinks, as that it is impossible to transcend restriction, if thought will not apply itself to see what is implied in the concept, it can then be referred to actuality, where the propositions prove themselves to be completely unrealistic. Just because thought *ought* to be something higher than actuality, just because it *ought* to dwell in higher regions remote from it, and therefore be itself determined as an *ought*, it fails on the one hand to advance to the concept, and on the other hand it manages to be equally untrue both in its relation to actuality and to the concept. – Because a stone does not think, does not even feel, its determinateness is not a restriction *for it*, that is, it is not in it a negation for the sensation, the representation, the thought, and so on, which it does not have. But the stone too is as a something distinguished in its determination or its in-itself and existence, and to this extent it too transcends its restriction; the concept which the
21.122 stone is in itself contains the identity with its other. If it is a base receptive to acids then it is oxidizable, neutralizable, and so on. In the process of oxidization, neutralization, and so on, its restriction to being only a base is sublated; the base transcends it; similarly, the acid transcends its restriction to being an acid, and in the acid just as in the caustic base the *ought*, *the imperative* to transcend their restriction, is so strong that it is only with violence that they can be kept fixed as acid and caustic base (as waterless, that is, purely non-neutral).

If, however, a concrete existence contains the concept not merely as abstract in-itselfness, but as a totality existing for itself, as instinct, life, sensation, representation, and so forth, it itself then brings about, by itself, this transcendence and this transcending. The plant transcends the restriction of being a seed, similarly, of being blossom, fruit, leaf; the seed becomes the developed plant, the blossom fades, and so forth. In the grip of hunger, thirst, and so forth, the sentient is the impulse to transcend this restriction, and it does transcend it. It feels *pain*, and to feel pain is the privilege of sentient nature. Pain is a negation within the sentient's self, and this negation is determined *as a restriction* in the sentient's feeling just because the sentient has a feeling of its *self*, and this self is the totality that transcends

the determinateness of the negation. If the sentient did not transcend it, it would not feel it as its negation and would have no pain. – But reason, thought, is not supposed to be able to transcend this restriction: reason, which is the *universal*, which is for itself the beyond of particularity *as such*, that is, of *all* particularity, only is the transcendence of restriction. – To be sure, not every transcending, not every transcendence beyond restriction, is a true liberation from it, a true affirmation; even the "ought" itself is this kind of imperfect transcending, and so abstraction in general. But the mention of a totally abstract universal is sufficient to counter the equally abstract pronouncement that restriction cannot be transcended, or, again, the mention of the infinite in general is sufficient to counter the pronouncement that the finite cannot be transcended.

We can recall in this context a seemingly ingenious notion of Leibniz: that if a magnet had consciousness, it would regard its pointing to the North as a determination of its will, a law of its freedom.[60] Rather, if the magnet did have consciousness and along with it a will and freedom, it would be a thinking being. Consequently, space would be for it a *universal* embracing *all* directions, and its *one* direction to the North thus a restriction rather of its freedom – just as being held fixed to one place is a restriction for a human being, but not for a plant. **21.123**

The *ought*, for its part, is the transcending of restriction, but a *transcending* which is itself only *finite*. It therefore has its place and legitimacy in the field of finitude, where it holds in-itself fixed over against what is restricted, declaring it to be the norm and the essential relative to what is null. Duty is an *ought* directed against the particular will, against self-seeking desire and arbitrary interest; it is the ought held up before a will capable of isolating itself from the truth because of its instability. Those who hold the ought of morality so high as to believe that, by not recognizing it as the ultimate truth, morality itself would be destroyed; the brokers of reason whose understanding takes unceasing satisfaction in being able to confront everything that there is with an ought and consequently a would-be superior knowledge – who therefore are all the more resistant to being robbed of the ought – these do not see that, as regards the finitude of their sphere, the ought receives full recognition. – But in the actual order of things, reason and law are not in such a sad state of affairs that they only *ought* to be (only the abstraction of the in-itself stays at this); equally, the ought does not perpetuate itself nor, which is the same, is finitude absolute. The philosophy of Kant and Fichte holds out the *ought* as the resolution of

[60] Leibniz, *Theodicy* (1710), Part 1, §50.

the contradictions of reason – though it is rather only a standpoint that remains fixed in finitude and therefore in contradiction.

γ. *Transition of the finite into the infinite*

The ought contains restriction explicitly, for itself, and restriction contains the ought. Their mutual connection is the finite itself, which contains them both in its in-itself. These moments of its determination are qualitatively opposed; restriction is determined as the negative of the ought, and the ought equally as the negative of restriction. The finite is thus in itself the contradiction of itself; it sublates itself, it goes away and ceases to be.[61] But this, its result, the negative as such, is (α) its very *determination*; for it is the negative of the negative. So, in going away and ceasing to be, the finite has not ceased; it has only become momentarily an *other* finite which equally is, however, a going-away as a going-over into another finite, and so forth *to infinity*. But, (β) if we consider this result more closely, in its going-away and ceasing-to-be, in this negation of itself, the finite has attained its being-in-itself; in it, it has *rejoined itself*. Each of its moments contains precisely this result; the ought transcends the restriction, that is, it transcends itself; but its beyond, or its other, is only restriction itself. Restriction, for its part, immediately points beyond itself to its other, and
21.124 this is the ought; but this ought is the same diremption of *in-itselfness* and *determinateness* as is restriction; it is the same thing; in going beyond itself, restriction thus equally rejoins itself. This *identity with itself*, the negation of negation, is affirmative being, is thus the other of the finite which is supposed to have the first negation for its determinateness; this other is *the infinite*.

C. INFINITY

The infinite in its simple concept can be regarded, first of all, as a fresh definition of the absolute; as self-reference devoid of determination, it is posited as *being* and *becoming*. The forms of *existence* have no place in the series of determinations that can be regarded as definitions of the absolute, since the forms of that sphere are immediately posited for themselves only as determinacies, as finite in general. But the infinite is accepted unqualifiedly as absolute, since it is explicitly determined as the negation

[61] "It goes away or ceases to be" = *vergeht*. I am using both expressions to retain Hegel's play on words in this whole passage.

of the finite; the restrictedness – to which being and becoming would somehow be susceptible even if they do not have it or exhibit it – is thereby both explicitly referred to and denied in it.

But, in fact, by just this negation the infinite is not already free from restrictedness and finitude. It is essential to distinguish the true concept of infinity from bad infinity, the infinite of reason from the infinite of the understanding. The latter is in fact a *finitized* infinite, and, as we shall now discover, in wanting to maintain the infinite pure and distant from the finite, the infinite is by that very fact only made finite.

The infinite

(a) in *simple determination*, is the affirmative as negation of the finite;
(b) but is thereby in *alternating determination* with the *infinite*, and is abstract, *one-sided infinite*;
(c) is the self-sublation of this infinite and of the finite in *one process*. This is the *true infinite*. **21.125**

a. The infinite in general

The infinite is the negation of negation, the affirmative, *being* that has reinstated itself out of restrictedness. The infinite *is*, in a more intense sense than the first immediate being; it is the true being; the elevation above restriction. At the mention of the infinite, soul and spirit *light up*, for in the infinite the spirit *is* at home, and not only abstractly; rather, it rises to itself, to the light of its thinking, its universality, its freedom.

What is first given with the concept of the infinite is this, that in its being-in-itself existence is determined as finite and transcends restriction. It is the very nature of the finite that it transcend itself, that it negate its negation and become infinite. Consequently, the infinite does not stand *above* the finite as something ready-made by itself, as if the finite stood fixed *outside* or *below* it. Nor is it *we* only, as a subjective reason, who transcend the finite into the infinite – as if, in saying that the infinite is a concept of reason and that through reason we elevate ourselves above things temporal, we did this without prejudice to the finite, without this elevation (which remains external to the finite) affecting it. In so far as the finite itself is being elevated to infinity, it is not at all an alien force that does this for it; it is rather its nature to refer itself to itself as restriction (both restriction as such and as ought) and to transcend this restriction, or rather, in this self-reference, to have negated the restriction and gone above and beyond it. It is not in the sublation of the finite in general that infinity in general comes to be, but the finite is rather just this, that through its nature it

comes to be itself the infinite. Infinity is its *affirmative determination*, its vocation, what it truly is in itself.

The finite has thus vanished into the infinite and what *is*, is only the
21.126 *infinite*.

b. Alternating determination of finite and infinite

The infinite *is*; in this immediacy it is at the same time the *negation* of an *other*, of the finite. And so, as *existent* and at the same time as the *non-being* of an *other*, it has fallen back into the category of the something, of something determinate in general. More precisely: the infinite is the existence reflected into itself which results from the mediating sublation of determinateness in general and is consequently *posited* as existence distinct from its determinateness; therefore, it has fallen back into the category of something with a limit. In accordance with this determinateness, the finite stands over against the infinite as *real existence*; they thus *remain* outside each other, standing in qualitative *mutual reference*; the *immediate being* of the infinite resurrects the *being* of its negation, of the finite again, which seemed at first to have vanished into the infinite.

But the infinite and the finite are not in these referential categories only; the two sides are further determined in addition to being as mere *others* to each other. Namely, the finite is restriction posited as restriction; it is existence posited with the *determination* that it passes over into what is its *in-itself* and *becomes* infinite. Infinity is the nothing of the finite, the *in-itself* that the latter *ought to be*, but it is this at the same time as reflected within itself, as realized ought, as only affirmative self-referring being. In infinity we have the satisfaction that all determinateness, alteration, all restriction and the ought itself together with it, have vanished, are sublated, and the nothing of the finite is posited. As this negation of the finite is the being-in-itself determined which, as negation of negation, is in itself affirmative. Yet this affirmation is qualitatively *immediate* self-reference, *being*; and, because of this, the affirmative is led back to the category of being that has the finite confronting it as an *other*; its negative nature is posited as *existent* negation, and hence as first and immediate negation. The infinite is in this way burdened with the opposition to the finite, and this finite, as an other, remains a real existence even though in its being-in-itself, in the infinite, it is at the same time posited as sublated; this infinite is that which is not finite – a being in the determinateness of negation. Contrasted with the finite, with the series of existent determinacies, of realities, the infinite is

indeterminate emptiness, the beyond of the finite, whose being-in-itself is not in its existence (which is something determinate). **21.127**

As thus posited over against the finite, the two connected by the qualitative mutual reference of *others*, the infinite is to be called the *bad infinite*, the infinite of the *understanding*, for which it counts as the highest, the absolute truth. The understanding believes that it has attained satisfaction in the reconciliation of truth while it is in fact entangled in unreconciled, unresolved, absolute contradictions. And it is these contradictions, into which it falls on every side whenever it embarks on the application and explication of these categories that belong to it, that must make it conscious of the fact.

This contradiction is present in the very fact that the infinite remains over against the finite, with the result that there are *two* determinacies. There are *two* worlds, one infinite and one finite, and in their connection the infinite is only the *limit* of the finite and thus only a determinate, *itself finite infinite*.

This contradiction develops its content into more explicit forms. – The finite is the real existence which persists as such even when it has gone over into its non-being, the infinite. As we have seen, this infinite has for its determinateness, over against the finite, only the first, immediate negation, just as the finite, as negated, has over against this negation only the meaning of an *other* and is, therefore, still a something. When, therefore, the understanding, elevating itself above this finite world, rises to what is the highest for it, to the infinite, the finite world remains for it as something on this side here, and, thus posited only *above* the finite, the infinite is *separated* from the finite and, for the same reason, the finite from the infinite: each is *placed in a different location*, the finite as existence here, and the infinite, although the *being-in-itself* of the finite, there as a beyond, at a nebulous, inaccessible distance *outside* which there stands, enduring, the finite.

As thus separated, they are just as much essentially *connected* with each other, through the very negation that divides them. This negation connecting them – these somethings reflected into themselves – is the common limit of each over against the other; and that, too, in such a way that each does not merely have this limit *in it* over against the other, but the negation is rather the *in-itselfness* of each; each thus has for itself, in its separation from the other, the limit in it. But the limit is the first negation; both are thus limited, finite, in themselves. Yet, as each affirmatively refers itself to itself, each is also the negation of its limit; each thus immediately repels the negation from itself as its non-being, and, qualitatively severed from it, **21.128**

posits it as an *other being* outside it: the finite posits its non-being as this infinite, and the infinite likewise the finite. It is readily conceded that the finite passes over into the infinite necessarily (that is, through its determination) and is thereby elevated to what is its in-itself, for while the finite is indeed determined as subsistent existence, it is at the same time *also* a null *in itself* and therefore destined to self-dissolution; whereas the infinite, although burdened with negation and limit, is equally also determined as the existent *in-itself*, so that this abstraction of self-referring affirmation is what constitutes its determination, and hence finite existence is not present in it. But it has been shown that the infinite itself attains affirmative being only *by the mediation* of negation, as negation of negation, and that when its affirmation thus attained is taken as just simple, qualitative being, the negation contained in it is demoted to simple immediate negation and, therefore, to determinateness and limit; and these, then, are excluded from the infinite as contradicting its in-itself; they are posited as not belonging to it but rather as opposed to its in-itself, as the finite. Since each is in it and through its determination the positing of its other, the two are *inseparable*. But this unity rests *hidden* in their qualitative *otherness*; it is their *inner* unity, one that lies *only at their base*.

The manner of the appearance of this unity has thereby been defined. The unity is posited in *existence* as a turning over or transition of the finite into the infinite, and vice-versa; so that the infinite only *emerges* in the finite, and the finite in the infinite, the other in the other; that is to say, each arises in the other independently and *immediately*, and their connection is only an external one.

The process of their transition has the following, detailed shape. We have the finite passing over into the infinite. This passing over appears as an external doing. In this emptiness beyond the finite, what arises? What is there of positive in it? On account of the inseparability of the infinite and the finite (or because this infinite, which stands apart, is itself restricted), the limit arises. The infinite has vanished and the other, the finite, has stepped in. But this stepping in of the finite appears as an event external
21.129 to the infinite, and the new limit as something that does not arise out of the infinite itself but is likewise found given. And with this we are back at the previous determination, which has been sublated in vain. This new limit, however, is itself only something to be sublated or transcended. And so there arises again the emptiness, the nothing, in which we find again the said determination – and *so forth to infinity*.

We have before us the *alternating determination of the finite and the infinite*; the finite is finite only with reference to the ought or the infinite,

and the infinite is only infinite with reference to the finite. The two are inseparable and at the same time absolutely other with respect to each other; each has in it the other of itself; each is thus the unity of itself and its other, and, in its determinateness – *not to be* what itself and what its other is – it is existence.

This alternating determination of self-negating and of negating the negating is what passes as the *progress to infinity*, which is accepted in so many shapes and applications as an unsurpassable *ultimate* at which thought, having reached this "*and so on to infinity*," has usually achieved its end. – This progress breaks out *wherever relative* determinations are pressed to the point of opposition, so that, though in inseparable unity, each is nevertheless attributed an independent existence over against the other. This progress is therefore the *contradiction* which is not resolved but is rather always pronounced simply as *present*.

What we have before us is an abstract transcending which remains incomplete because *the transcending itself* has not been *transcended*. Before us we have the infinite; of course, this infinite is transcended, for another limit is posited, but just because of that only a return is instead made back to the finite. This bad infinite is in itself the same as the perpetual *ought*; it is indeed the negation of the finite, but in truth it is unable to free itself from it; the finite constantly resurfaces in it as its other, since this infinite only is *with reference* to the finite, which is its other. The progress to infinity is therefore only repetitious monotony, the one and the same tedious *alternation* of this finite and infinite. **21.130**

The infinity of the infinite progress remains burdened by the finite as such, is thereby restricted, and is itself *finite*. In fact, however, it is thereby posited as the unity of the finite and the infinite. Only, this unity is not reflected upon. Yet it alone rouses the finite in the infinite, and the infinite in the finite; it is, so to speak, the impulse driving the infinite progress. This progress is the *outside* of this unity at which representation remains fixated – fixated at that perennial repetition of one and the same alternation; at the empty unrest of a progression across the limit towards the infinite which, in this infinity, *finds* a new limit but is just as unable to halt at it as it is at the infinite. This infinite has the rigid determination of a *beyond* that cannot be attained, for the very reason that it *ought* not be attained, since the determinateness of the beyond, of an *existent* negation, has not been let go. In this determination, the infinite has the finite as a *this-side* over against it – a finite that is likewise unable to raise itself up to the infinite just because it has this determination of an *other*, that is, of an *existence* that perennially regenerates itself in that beyond precisely by being different from it.

c. Affirmative infinity

In this reciprocal determination of the finite and the infinite alternating back and forth as just indicated, the truth of these two is already implicitly *present* in itself, and all that is needed is to take up what is there. This back and forth movement constitutes the external realization of the concept in which the content of the latter is *posited*, but *externally*, as a falling out of
21.131 the two; all that is needed is the comparing of these two different moments in which the *unity* is given which the concept itself gives. "*Unity* of the finite and the infinite" – as has often been already noted but must especially be kept in mind at this juncture – is the uneven expression for the unity as it is in truth; but also the removal of this uneven determination must be found in the externalization of the concept that lies ahead of us.

Taken in their first, only immediate determination, the infinite is the *transcending* of the *finite*; according to its determination, it is the negation of the finite; the finite, for its part, is only that which must be transcended, the negation in it of itself, and this is the infinite. *In each*, therefore, there is *the determinateness of the other*, whereas, according to the viewpoint of the infinite progression, the two should be mutually excluded and would have to follow one another only alternately; neither can be posited and grasped without the other, the infinite without the finite, the finite without the infinite. In *saying* what the infinite is, namely the negation of the *finite*, the finite itself is *said* also; it cannot be *avoided* in the determination of the infinite. One need only *know what is being said* in order to find the determination of the finite in the infinite. Regarding the finite, it is readily conceded that it is the null; this very nothingness is however the infinite from which it is inseparable. – Understood in this way, they may seem to be taken according to the way each *refers* to its *other*. Taken *without this connecting reference*, and thus joined only through an "and," they subsist independently, each only an existent over against the other. We have to examine how they would be constituted in this way. The infinite, thus positioned, is *one of the two*; but, as *only* one of them, it is itself finite, it is not the whole but only one side; it has its limit in that which stands over against it; and so it is the *finite infinite*. We have before us only *two finites*. The finitude of the infinite, and therefore its unity with the finite, lies in the very fact that it is *separated* from the finite and placed, consequently, *on one side*. – The finite, for its part, removed from the infinite and positioned for itself, is *this self-reference* in which the relativity, its dependence and transitoriness, are removed; it is the same self-subsistence and self-affirmation which the infinite is presumed to be.

The two pathways of consideration, even though they seem at first to have each a different determinateness for their point of departure – the former inasmuch as it assumes it to be only the *reference* of infinite and finite to each other, of each to the other; and the latter their complete separation from each other – yield one and the same result. The infinite **21.132** and the finite, taken together as *referring* to each other in a connection which is presumed external but is in fact essential to them (for without it, neither is what it is), each contains its other in its own determination, just as, when each is taken *for itself*, when looked at *on its terms*, each has the other present in it as its own moment.

This yields, then, the scandalous unity of the finite and the infinite – the unity which is itself the infinite that embraces both itself and the finite – the infinite, therefore, understood in a sense other than when the finite is separated from it and placed on the other side from it. Since they must now also be distinguished, each is within it, as just shown, itself the unity of both; there are thus two such unities. The common element, the unity of both determinacies, as such a unity, posits them at first as negated, for each is to be what it is in being distinguished; in their unity, therefore, they lose their qualitative nature – an important reflection for countering the incorrigible habit of representing the infinite and the finite, in their unity, as still holding on to the quality that they would have when taken apart from each other; of seeing in that unity, therefore, nothing except contradiction, and not also the resolution of the contradiction by the negation of the qualitative determinateness of each. And so is the unity of the infinite and the finite, at first simple and universal, falsified.

But further, since the two are now to be taken also as distinguished, the unity of the infinite which is itself both of these moments is determined differently in each. The infinite, determined as such, has in it the finitude which is distinct from it; in this unity, the infinite is the *in-itself* while the finite is only determinateness, the limit in the infinite. But such a limit is the absolute other of the infinite, its opposite. The infinite's determination, which is the in-itself as such, is corrupted by being saddled with a quality of this sort; the infinite is thus a *finitized infinite*. Likewise, since the finite is as such only the non-in-itself but equally has its opposite in it by virtue of the said unity, it is elevated above its worth and, so to speak, infinitely elevated; it is posited as the *infinitized finite*.

Likewise, just as the simple unity of infinite and finite was falsified before by the understanding, so too is the double unity. Here also this happens because the infinite is taken in one of the two unities not as negated but, rather, as the in-itself in which, therefore, determinateness and restriction

should not be posited, for they would debase and corrupt it. Conversely,
21.133 the finite is equally held fixed as not negated, although null in itself; so that, in combination with the infinite, it is elevated to what it *is* not and is thereby infinitized notwithstanding its determination that has not vanished but is rather perpetuated.

The falsification that the understanding perpetrates with respect to the finite and the infinite, of holding their reciprocal reference fixed as qualitative differentiation, of maintaining that their determination is separate, indeed, absolutely separate, comes from forgetting what for the understanding itself is the concept of these moments. According to this concept, the unity of the finite and the infinite is not an external bringing together of them, nor an incongruous combination that goes against their nature, one in which inherently separate and opposed terms that exist independently and are consequently incompatible, would be knotted together. Rather, each is itself this unity, and this only as a *sublating* of itself in which neither would have an advantage over the other in in-itselfness and affirmative existence. As has earlier been shown, finitude is only as a transcending of itself; it is therefore within it that the infinite, the other of itself, is contained. Similarly, the infinite is only as the transcending of the finite; it therefore contains its other essentially, and it is thus within it that it is the other of itself. The finite is not sublated by the infinite as by a power present outside it; its infinity consists rather in sublating itself.

This sublating is not, consequently, alteration or otherness in general, not the sublating of *something*. That into which the finite is sublated is the infinite as the negating of finitude. But the latter has long since been only existence, determined as a *non-being*. It is only the *negation*, therefore, that in the negation sublates itself. Thus infinity is determined on its side as the negative of the finite and thereby of determinateness in general, as an empty beyond; its sublating of itself into the finite is a return from an empty flight, the *negation* of the beyond which is inherently a *negative*.

Present in both, therefore, is the same negation of negation. But this negation of negation is *in itself* self-reference, affirmation but as turning back to itself, that is, through the *mediation* that the negation of negation is.
21.134 These are the determinations that it is essential to bring to view; the second point, however, is that in the infinite progression they are also *posited*, and how they are posited therein, namely, not in their ultimate truth.

First, both are negated in that progression, the infinite as well as the finite; both are equally transcended. Second, they are also posited as distinct, one after the other, each positive for itself. We sort out these two determinations while comparing them, just as in the comparison (in an external comparing)

we have separated the two ways of considering them: the finite and the infinite as referring to one another, and each taken for itself. The infinite progression, however, says more than this. Also posited in it, though at first still only as transition and alternation, is the *connectedness* of the terms being *distinguished*. We now only need to see, in one simple reflection, what is in fact present in it.

In the first place, the negation of the finite and the infinite which is posited in the infinite progression can be taken as simple, and hence as mutual externality, only a following of one upon the other. Starting from the finite, the limit is thus transcended, the finite negated. We now have its beyond, the infinite, but in this the limit *rises up* again; so we have the transcending of the infinite. This twofold sublation is nonetheless partly only an external event and an alternating of moments in general, and partly still not posited as *one unity*; each of these moves beyond is an independent starting point, a fresh act, so that the two fall apart. – But, in addition, their *connection* is also present in the infinite progression. The *finite* comes *first*; *then* there is the transcending of it, and this negative, or this beyond of the finite, is the infinite; *third*, this negation is transcended in turn, a new limit comes up, a *finite* again. – This is the complete, self-closing movement that has arrived at that which made the beginning; what emerges is *the same* as that *from which the departure was made*, that is, the finite is restored; the latter has therefore *rejoined itself*, in *its beyond* has only *found itself again*.

The same is the case regarding the infinite. In the infinite, in the beyond of the limit, only a new limit arises which has the same fate, namely, that as finite it must be negated. Thus what is again at hand is the *same* infinite that just now disappeared in the new limit; by being sublated, by traversing the new limit, the infinite has not therefore advanced one jot further: it has distanced itself neither from the finite (for the finite is just this, to pass **21.135** over into the infinite), nor from itself, for it has *arrived at itself*.

Thus the finite and the infinite are both this *movement* of each returning to itself through its negation; they are only as implicit *mediation*, and the affirmative of each contains the negative of each, and is the negation of the negation. – They are thus a *result* and, as such, not in the determination that they had at the *beginning*: neither is the finite an *existence* on its side nor the infinite an *existence* or a *being-in-itself* beyond that existence, that is, beyond existence in the determination of finitude. The understanding strongly resists the unity of the finite and the infinite only because it presupposes restriction and finitude to remain, like being-in-itself, *constants*. It thereby *overlooks* the negation of both which is in fact present in the infinite progression, just as it equally overlooks that the two occur in this

progression only as moments of a whole – that each emerges only through the mediation of its opposite but, essentially, equally by means of the sublation of its opposite.

If this immanent turning back has for the moment been reckoned to be just as much the turning back of the finite to itself and of the infinite to itself, noticeable in this very result is an error connected with the one-sidedness just criticized: the finite and then the infinite is each taken as the *starting point*, and only in this way *two* results ensue. But it is a matter of total indifference which is taken as the starting point and, with this, the distinction caused by the *duality* of results dissolves of itself. This is likewise posited in the line of the infinite progression, open-ended on both sides, wherein each of the moments recurs in equal alternation, and it is totally extraneous at which position the progression is arrested and taken as beginning. – The moments are distinguished in the progression but each is equally only moment of the other. Since both, the finite and the infinite, are themselves moments of the progress, they are *jointly the finite*, and, since they are equally jointly negated in it and in the result, this result as the negation of their joint finitude is called with truth the infinite. Their distinction is thus the *double meaning* which they both have. The finite has the double meaning, first, of being the finite *over against* the infinite which stands over against it, and, second, of being *at the same time* the finite and the infinite over against the infinite. Also the infinite has the double meaning of being *one* of the two moments (it is then the bad infinite) and of being the infinite in which the two moments, itself and its other, are only moments. Therefore, as in fact we now have it, the nature of the infinite is that it is the process in which it lowers itself to be only *one* of its determinations over against the finite and therefore itself only one of the
21.136 finites, and elevates this distinction of itself and itself to be self-affirmation and, through this mediation, the *true infinite*.

This determination of the true infinite cannot be captured in the already criticized *formula* of a *unity* of the finite and the infinite; *unity* is abstract, motionless self-sameness, and the moments are likewise unmoved beings. But, like both its moments, the infinite is rather essentially only as *becoming*, though a becoming now *further determined* in its moments. Becoming has for its determinations, first, abstract being and nothing; as alteration, it has existence, something and other; now as infinite, it has finite and infinite, these two themselves as in becoming.

This infinite, as being-turned-back-unto-itself, as reference of itself to itself, is *being* – but not indeterminate, abstract being, for it is posited as negating the negation; consequently, it is also *existence* or

"*thereness*,"[62] for it contains negation in general and consequently determinateness. It *is*, and *is there*, present, before us. Only the bad infinite is the *beyond*, since it is *only* the negation of the finite posited as *real* and, as such, it is abstract first negation; thus determined *only* as negative, it does not have the affirmation of *existence* in it; held fast only as something negative, it *ought not to be there*, it ought to be unattainable. However, to be thus unattainable is not its grandeur but rather its defect, which is at bottom the result of holding fast to the finite as such, *as existent*. It is the untrue which is the unattainable, and what must be recognized is that such an infinite is the untrue. – The image of the progression in infinity is the straight *line*; the infinite is only at the two limits of this line, and always only is where the latter (which is existence) is not but *transcends itself*, in its non-existence, that is, in the indeterminate. As true infinite, bent back upon itself, its image becomes the *circle*, the line that has reached itself, closed and wholly present, without *beginning* and *end*.

True infinity, thus taken in general as *existence* posited as *affirmative* in contrast to abstract negation, is *reality* in a higher sense than it was earlier as *simply* determined; it has now obtained a concrete content. It is not the finite which is the real, but rather the infinite. Thus reality is further determined as essence, concept, idea, and so forth. In connection with the more concrete, it is however superfluous to repeat such earlier and more abstract categories as reality, and to use them for determinations more concrete than they are by themselves. Such a repetition, as when it is said that essence, or that the concept, is real, has its origin in the fact that to uneducated thought the most abstract categories such as being, existence, reality, finitude, are the most familiar. **21.137**

The more immediate occasion, however, for recalling here the categories of reality is that the negation, against which reality is the affirmative, is here the negation of negation, and consequently itself posited over against that reality which finite existence is. – Negation is thus determined as ideality; the idealized[h] is the finite as it is in the true infinite – as a determination, a content, a distinct but not *a subsistent existent*, a *moment* rather. Ideality has this more concrete signification which is not fully expressed through the negation of finite existence. – As regards reality and ideality, the opposition

[h] The *ideal* [*das Ideale*] has a broader meaning (such as of the beautiful and its associations) than the *idealized* [*das Ideelle*]. The former does not belong here yet, and for this reason the expression *idealized* is being used. There is no such distinction made in language usage for "reality"; in German *reelle* and *reale* are used as roughly synonymous and no interest is served in nuancing the two in some sort of opposition.

[62] I am glossing in "thereness" in order to retain Hegel's subsequent play on words.

of finite and infinite is, however, so grasped that the finite assumes the value of "the real," whereas the infinite that of "the idealized"; in the same way, further on, also the concept is regarded as an idealization, that is, as a *mere* idealization, in contrast to existence in general, which is regarded as "the real." When contrasted in this way, it is of course of no use to have reserved for the said concrete determination of negation the distinctive expression of "idealization"; in that opposition of finite and infinite, we are back to the one-sidedness of the abstract negative characteristic of the bad infinite and still fixed in the affirmative existence of the finite.

Transition

Ideality can be called the *quality* of the infinite; but it is essentially the process of *becoming*, and hence a transition – like the transition of becoming into existence. We must now explicate this transition. This immanent turning back, as the sublating of finitude – that is, of finitude as such and equally of the negative finitude that only stands opposite to it, is only negative finitude – is self-*reference*, *being*. Since there is negation in this being, the latter is *existence*; but, further, since the negation is essentially negation of the negation, self-referring negation, it is the existence that carries the name of *being-for-itself*.

Remark 1

The infinite – in the usual sense of the bad infinite – and the *progression to*
21.138 *infinity*, such as the ought, are the expression of a *contradiction* that pretends to be itself a *solution* and an *ultimate*. This infinite is a first elevation of sense representation above the finite to thought, but to a thought which, for content, has only a nothing, that is, a non-existent *explicitly* posited as such: it is a flight beyond restrictions that fails to gather itself together within and is unable to bring the negative back to the positive. This *unfulfilled reflection* has before it both the determinations of the true infinite (namely the *opposition* of the finite and the infinite, and the *unity* of the finite and the infinite) but fails to bring the *two thoughts together*; the thought of one unavoidably brings the other along, but this reflection lets them only *alternate*. The spectacle of this alternation, this infinite progression, occurs wherever one remains fixated on the contradiction of the *unity* of two determinations and of their *opposition*. The finite is the sublation of itself; it holds its negation, the infinity, in itself: *unity* of the two. It is the movement *beyond* the finite into the infinite as the beyond of the finite: *separation* of the two. But over and beyond the infinite there is another finite; the beyond, the infinite, holds finitude: *unity* of the two. But this

finite is also a negative of the infinite: *separation* of the two, and so forth. – Thus, in the relation of causality, cause and effect are inseparable; a cause that would have no effect is not a cause, just as an effect that had no cause would no longer be effect. This relation yields, therefore, the infinite progression of *causes* and *effects*; something is determined as cause, but, as something finite (and it is finite just because of its separation from the effect), it has itself a cause, that is, it is also effect; consequently, the *same thing* that was determined as cause is also determined as effect (unity of cause and effect); what is now determined as effect has in turn a cause, that is, the cause is to be *separated* from its effect and to be posited as a different something; this new cause is however itself only an effect (*unity* of cause and effect); it has an other for its cause; separation of the two determinations, and so forth, into *infinity*.

We can thus restate the progression in this more appropriate form. The claim is made that the finite and the infinite are one unity. This is a false claim that needs correction by its opposite: the two are absolutely different and opposed. This claim is in turn to be corrected to the effect that the two are inseparable; that in the one determination there lies the other by virtue of the claim to unity; and so forth to infinity. – It is easy enough to see into the nature of the infinite: one must recognize that the infinite **21.139**
progression, the developed infinity of the understanding, is constituted by the *alternation* of the two determinations, of the *unity* and the *separation* of the two moments; and then further recognize that this unity and this separation are inseparable.

The resolution of this contradiction is not the acknowledgment of the *equal correctness*, and of the equal incorrectness, of both claims – this would only be another shape of the still abiding contradiction – but the *ideality* of both, in the sense that in their distinction, as reciprocal negations, they are only moments. That monotonous alternation of the infinite progression is in fact the negation of both their *unity* and their *separation*. What was demonstrated above is just as much present in it *de facto*: namely, that the finite, over and beyond itself, falls into the infinite, but that, over and beyond this infinite, it equally finds itself born anew; hence, that it rejoins itself there, as is also the case for the infinite – so that this same negation of negation results in *affirmation*, a result that thereby proves itself to be their truth and point of origin. In this being which is thus the *ideality* of the distinct moments, the contradiction has not vanished abstractly,[63] but is resolved and reconciled, and the thoughts, while left intact, are

[63] i.e. by abstracting from the differences that give rise to the contradiction.

also *brought together*. Here we have, in a graphic example, the nature of speculative thought displayed in its determining feature: it consists solely in grasping the opposed moments in their unity. Inasmuch as each moment shows, as a matter of fact, that it has its opposite in it, and that in this opposite it rejoins itself, the affirmative truth is this internally self-moving unity, the grasping together of both thoughts, their infinity – the reference to oneself which is not immediate but infinite.

The essence of philosophy has often been located by those already adept in the things of thought in the task of answering the question: *How does the infinite go forth out of itself and come to finitude?* – This, as opinion would have it, escapes *conceptual comprehension*. In the course of this exposition, the infinite at whose concept we have arrived will *further determine* itself, and the desideratum – *how* the infinite (if one can so express oneself) *comes to finitude* – will be manifested in it in the full manifold of forms. Here we
21.140 are considering this question only in its immediacy and in view of the just mentioned sense which the infinite usually carries.

It is above all on the answer to this question that *whether there is a philosophy* is taken to depend, and people believe, while still professing willingness to let the matter rest on it, that they also possess in the question itself a sort of puzzle, an invincible talisman, that firmly secures them against the answer, and consequently against philosophy and the attainment of it. In order to understand *questions*, a certain education is required also in other subject matters, and this is all the more the case for things philosophical if more of an answer is to be had than that the question is an idle one. – It is fair to expect in these questions, as is normally done, that the point at issue would not depend on words but would rather be made intelligible through some form or other of expression. Figurative expressions of sense representation that are used in the question regarding the infinite, like "going forth" and suchlike, arouse the suspicion that the question stemmed from the terrain of vulgar representation, and that the answer is also expected to be in representations current in everyday life and in the shape of a sensuous simile.

Take being in general, instead of the infinite. The *determining of it*, its having a negation or finitude in it, seems easier to comprehend. Being is indeed the indeterminate, but it is not immediately said in it that it is the opposite of anything determinate. The infinite, on the contrary, contains this note expressly; it is the *non*-finite. The unity of the finite and the infinite thus appears excluded from the start; incomplete reflection is most stubbornly opposed to this unity for precisely this reason.

But it has been shown, and it is immediately evident without expanding further on the determination of the finite and the infinite, that the infinite,

in the sense in which it is taken by that incomplete reflection, namely as standing opposite the finite, has its other in it precisely because it stands opposed to it, and is therefore already limited and itself finite. It is the bad infinite. The answer to the question, "how does the infinite become finite?," is therefore this: *There is* not an infinite which is infinite *beforehand*, **21.141** and only *afterwards* does it find it necessary to become finite, to go forth into *finitude*; the infinite is rather for itself just as much finite as infinite. Inasmuch as the question assumes that the infinite is by itself on the one side, and that the finite which has gone forth from it (or from wherever it might have come) into the divide is truly real as thus separated from the infinite, one should say rather that it is this divide which is *conceptually incomprehensible*. Neither such a finite nor such an infinite has truth; that which has no truth, however, cannot be conceptually grasped. Yet it must be granted that they are conceptually comprehensible. To consider them even as they are in representation with the determination of each implicit in the other; to have a simple insight into this inseparability which is theirs, means that we comprehend them conceptually. *This inseparability is their concept*. – In the self-subsistence of that infinite and finite, the question sets up a false content instead; it presupposes a false connection between them. For this reason, the question is not to be answered, but the false presuppositions contained in it, in effect the question itself, are rather to be denied. By thus questioning the truth of such finite and infinite, the standpoint is altered, and this change will turn the embarrassment which the question was supposed to cause back on the question itself. To the reflection from which the question originated, our own *question* is something *new*, for that reflecting lacks the speculative interest that would lead it to ascertain for its own sake, and before it draws connections between determinations, whether such determinations are anything true as presupposed. To the extent, however, that the untruth of that abstract infinite is recognized, and of the finite which is equally supposed to stand unmoved on its side, there is this to be said of the procession of the finite out of the infinite: the infinite goes *out of itself* into the finite because, in the way it is grasped as abstract unity, it has no truth in it, no standing; and, conversely, the finite goes *forth* into the infinite for the same reason. Or it is rather to be said that the infinite proceeded to finitude from all eternity; that, just as much as pure *being*, it absolutely *is* not by itself alone, without having its other *in it*. **21.142**

The question how the infinite proceeds to the finite can harbor a further presupposition still, namely that the infinite includes the finite *within itself*, and consequently that it is the unity of itself and its other, so that the

difficulty has to do essentially with the *separating*, for this is in opposition to the presupposed unity. On this presupposition, the opposition insisted upon only assumes a different form; the *unity* and the *distinguishing* are separated from each other and held isolated. If, however, the unity is not taken abstractly and indeterminately, but rather, as in the presupposition, as the determinate unity of the *finite* and the *infinite*, the distinguishing of these two is also present in it. And this distinguishing is not one that would also let them go loose, each subsisting separately, but it rather leaves them in the unity as *idealized*. This *unity* of the infinite and the finite, and the *distinguishing* of them, are inseparable, in the same way as the finite and the infinite.

Remark 2

The claim that the *finite is an idealization* defines *idealism*. The idealism of philosophy consists in nothing else than in the recognition that the finite is not truly an existent. Every philosophy is essentially idealism or at least has idealism for its principle, and the question then is only how far this principle is carried out. This applies to philosophy just as much as to religion, for religion also, no less than philosophy, will not admit finitude as a true being, an ultimate, an absolute, or as something non-posited, uncreated, eternal. The opposition between idealistic and realistic philosophy is therefore without meaning. A philosophy that attributes to finite existence, as such, true, ultimate, absolute being, does not deserve the name of philosophy. The principles of ancient as well as more recent philosophies – whether "water," "matter," or "atoms" – are universals, idealizations, not things as given immediately, that is, in sensuous singularity. Not even the "water" of Thales is that, for, although also empirical water, it is besides that the *in-itself* or *essence* of all other things, and these things do not stand on their own, self-grounded, but are *posited* on the basis of an other, of "water," that is, they are idealized. In thus calling the principle or the universal an *idealization* as we have just done (and the concept, the idea, spirit, deserve the name even more), and in saying then that the singular things of the senses are *idealizations* in principle, or in their concept, and even more so
21.143 when sublated in the spirit, we must note, in passing, the same double-sidedness that transpired in the infinite, namely that an idealization is on the one hand something concrete, a true existent, but, on the other hand, that its moments are no less idealizations, sublated in it; in fact, however, there is only one concrete whole from which the moments are inseparable.

By an idealization is normally meant the form of *representation*. Whatever is in any of my representations, whether in the concept, the idea,

the imagination, and so forth, goes by the name of *idealization*, so that the "idealized" stands in general also for imaginary constructs – for representations that are not only distinguished from anything real but should essentially *not* be taken as real. In point of fact, spirit is above all the true *idealist*; in spirit, even as spirit senses and represents but still more as it thinks and conceptualizes, the content is not *real existence*, as so called; in the simplicity of the I, any such external being is only sublated, it is *for me*, it is in me *idealized*. This subjective idealism, whether it is the unconscious idealism of consciousness in general or is consciously declared and installed as principle, extends only to the *form* of representation according to which a content is mine. In the systematized idealism of subjectivity, this form is declared to be the only true form, one that excludes the form of the objectivity or reality of that content, of its *external existence*. Such an idealism is formal, since it does not take into consideration the *content* of representation or thought, and therefore does not go past its finitude. Nothing is lost by this idealism, both because the reality of this finite content (the existence filled with finitude) is retained, and because, if one abstracts from it, *in itself* nothing of much consequence is to be made of it. Nor is anything gained by it, for the same reason that nothing is lost, since the "I" remains representation, spirit still filled with the same content of finitude. The opposition of the forms of subjectivity and objectivity is of course itself one of finitudes; but the *content*, as taken up in sensation, intuition, or also in the more abstract element of representation and thought, contains such finitudes in full, and these, by the exclusion of that one mode of finitude alone (of the form of subjective and objective), are still not done away with, and even less have they fallen off on their own.

CHAPTER 3

Being-for-itself

21.144

In *being-for-itself*, *qualitative being* is *brought to completion*; it is infinite being; the being of the beginning is void of determination; existence is sublated but only immediately sublated being; it thus contains, to begin with, only the first negation, itself immediate; being is of course retained as well, and the two are united in existence in simple unity; for this reason, however, each is in itself still *unlike* the other, and their unity is still *not posited*. Existence is therefore the sphere of differentiation, of dualism, the domain of finitude. Determinateness is determinateness as such; being which is relatively, not absolutely, determined. In being-for-itself, the distinction between being and determinateness, or negation, is posited and equalized. Quality, otherness, limit, as well as reality, in-itselfness, ought, and so forth, are the incomplete configurations of negation in being which are still based on the differentiation of the two. But since in finitude negation has passed over into infinity, in the *posited* negation of negation, negation is simple self-reference and in it, therefore, the equalization with being – absolutely *determinate being*.

First, being-for-itself is immediately an existent-for-itself, the *one*.

Second, the one passes over into a *multiplicity of ones – repulsion* or the otherness of the one which sublates itself into its ideality, *attraction*.

Third, we have the alternating determination of repulsion and attraction in which the two sink into a state of equilibrium; and quality, driven to a
21.145 head in being-for-itself, passes over into *quantity*.

A. BEING-FOR-ITSELF AS SUCH

The general concept of being-for-itself has come to light. The justification for using the expression "being-for-itself" for that concept would depend on showing that the representation associated with the expression corresponds to the concept. So indeed it appears to do. We say that something is for itself inasmuch as it sublates otherness, sublates its connection and community

with other, has rejected them by abstracting from them. The other is in it only *as* something sublated, as *its moment*; being-for-itself consists in having thus transcended limitation, its otherness; it consists in being, as this negation, the infinite *turning back* into itself. – In *representing* to itself an intended object which it feels, or intuits, and so forth, consciousness already contains in itself as consciousness the determination of being-for-itself; that is, it has *in it* the content of that object, which is thus an *idealization*; even as it intuits, or in general becomes involved in the negative of itself, in the other, it *abides with itself*. Being-for-itself is the polemical, negative relating to the limiting other and, through this negation of the other, is being-reflected-within-itself – even though, *side by side* with this immanent turning back of consciousness and the ideality of its object, the *reality* of this object is *also* retained, for the object is *at the same time* known as an external existence. Consciousness is thus *phenomenal*,[64] or it is this dualism: on the one side, it knows an external object which is other than it; on the other side, it is for-itself, has this intended object in it as idealized, abides not only by this other but therein abides also with itself. *Self-consciousness*, on the contrary, is *being-for-itself brought to completion* and *posited*; the side of reference to another, to an external object, is removed. Self-consciousness is thus the nearest example of the presence of infinity – granted, of a still abstract infinity, but one which is of a totally different, concrete determination than the being-for-itself in general, whose infinity still has only qualitative determinateness. **21.146**

a. Existence and being-for-itself

As already mentioned, being-for-itself is infinity that has sunk into simple being; it is *existence* in so far as in the now posited form of the *immediacy* of being the negative nature of infinity, which is the negation of negation, is only as negation in general, as infinite qualitative determinateness. But in such a determinateness, wherein it is existence, being is at once also distinguished from this very being-for-itself which is such only as infinite qualitative determinateness; nevertheless, existence is at the same time a moment of being-for-itself, for the latter certainly contains being affected by negation. So the determinateness which in existence as such is an *other*, and a *being-for-other*, is bent back into the infinite unity of being-for-itself, and the moment of existence is present in the being-for-itself as *being-for-one*.

[64] *erscheinend.*

b. Being-for-one

This moment gives expression to how the finite is in its unity with the infinite or as an idealization. Being-for-itself does not have negation *in it* as a determinateness or limit, and consequently also not as reference to an existence other than it. Although this moment is now being designated as *being-for-one*, there is yet nothing at hand for which it would be – there is not the one of which it would be the moment. There is in fact nothing of the sort yet fixed in being-for-itself; that for which something (and there is no something here) would be, what the other side in general should be, is likewise a moment, itself only being-for-one, not yet a one. – What we have before us, therefore, is still an undistinguishedness of two sides that may suggest themselves in the being-for-one; there is only *one* being-for-another, and since this is only *one* being-for-another, it is also only being-for-one; there is only the one ideality, of that for which or in which there should be a determination as moment, and of that which should be the moment in it. *Being-for-one* and *being-for-itself* do not therefore constitute two genuine determinacies, each as against the other. Inasmuch as the distinction is momentarily assumed and we speak of *a-being-for-*
21.147 *itself*, it is this very being-for-itself, as the sublated being of otherness, that refers itself to itself as to the sublated other, is therefore *for-one*; in its other it refers itself only to itself. An idealization is necessarily *for-one*, but it is not for an *other*; the one, for which it is, is only itself. – The "I," therefore, spirit in general, or God, are idealizations, because they are infinite; as existents which are for-themselves, however, they are not ideationally different from that which is for-one. For if they were different, they would be only immediate, or, more precisely, they would only be existence and a being-for-another; for if the moment of being for-one did not attach to them, it is not they themselves but an other that would be that which is for them. God is therefore *for himself*, in so far he is himself that which is *for him*.

Being-for-itself and being-for-one are not, therefore, diverse significations of ideality but essential, inseparable, moments of it.

Remark

The German expression for querying the quality of a thing, "Was für ein *Ding etwas sey*," [or, "What *for a thing* is this or that"], though strange at first, reflectively brings out the moment here considered. This expression is idealistic in origin, since it does not ask what this thing *A* might be *for another thing B*, not what this human being might be for another human

being; it asks, rather, what *this is for a thing*, *for a human being*, so that this "being-for-one" is at the same time taken back into this thing, into this human being; or that *which is* and that *for which it is* are one and the same – an identity, such as ideality must also be considered to be.

Ideality at first attaches to the sublated determinations as distinguished from that *in which* they are sublated, which by contrast can be taken as the real. The result is that the idealization is again one of the moments and the real the other; ideality, however, consists in both determinations being equally only *for one* and having only the value of *a one*, and this *one* ideality, thus undifferentiated, is reality. In this sense, self-consciousness, spirit, God, are each, as an infinite reference purely to itself, an idealization – the "I" is for the "I," both are the same thing, the "I" is named twice, but in such a way that each of the two is for-one, ideally; spirit is only for spirit, God only for God, and this unity alone is God, God as spirit. – **21.148**
Self-consciousness, however, as consciousness, incurs the difference of *itself* and an *other* – or of its ideality (in which it is representational) and of its reality, since its representation has a determinate content which, as non-sublated negativity, as existence, still has the side of being known. However, to call thought, spirit, God, *only* an idealization, presupposes the standpoint according to which finite existence counts as the real, and idealization or the being-for-one has only a one-sided meaning.

The principle of idealism was stated in an earlier Remark[65] where it was said that in a philosophy all depends on how far this principle is implemented. Regarding the manner of this implementation, one further comment can still be made in connection with the categories that we are considering now. This implementation depends first of all on whether finite existence still remains standing on its own alongside the being-for-itself, but, besides that, on whether the moment of the *for-one*, a relation of idealization to itself as idealization, has already been posited in the infinite itself. Thus the being of the Eleatics or the Spinozistic substance are only the abstract negation of all determinateness, without ideality being posited in them – in the case of Spinoza, as it will be further mentioned below, infinity is only the absolute *affirmation* of a thing,[66] consequently only the unmoved unity; substance does not therefore ever attain the determination of being-for-itself, even less so of subject and of spirit. The idealism of the noble Malebranche is in itself more explicit. It contains the following basic thoughts: because God includes within itself all eternal truths, the

[65] Cf. above, 21.143.
[66] Cf. *Ethics*, Part I, Prop. VIII, note 1. Hegel referred to this aspect of Spinoza earlier; cf. 21.101.

ideas and the perfections of all things, so that they are *his and only his*, we see them only in him; God awakens our sensations of objects in us through an action that has nothing of the sensuous, whereby we imagine to ourselves that we gain of an intended object not only the idea depicting its essence but also the sensation of its existence (*De la recherche de la Verité, Eclaircissement Sur la nature des idées etc.*).[67] Thus, like the eternal truths and the ideas (essentialities) of things, the existence of these things is in God, is an idealization, not an actual existence; even though, as our intended objects, the same things are only *for one*. This moment of explicit and concrete idealism, lacking in Spinoza, is present here, in absolute ideality being determined as knowledge. Pure and profound as this idealism is, these relations contain nevertheless, on the one hand, much which is still indeterminate for thought and, on the other hand, a content which is at the same time much too concrete (sin and redemption, and so forth, also enter into them); the logical determination of infinity that would have to be their foundation is not elaborated on its own, and as a result such a noble and rich idealism, though indeed the product of pure speculative spirit, is not yet the product of pure speculative thinking, the kind which
21.149 alone would truly give it a foundation.

Leibnizian idealism lies more within the confines of the abstract concept. – The Leibnizian *ideating* being, the monad, is essentially an idealization.[68] Ideation is a being-for-itself in which the determinacies are not limits and therefore not an existence but rather only moments. Ideation is doubtless also a more concrete determination, but it has here no further meaning than that of ideality, since for Leibniz even the things that lack consciousness are representational, perceptual.[69] In this system, therefore, otherness is sublated; spirit and body or the monads in general are not an other for each other, do not limit each other, have no effect on each other; all relations based on an existence fall away in general. The manifold is such only ideally and internally, the monad persists in it only as referred to itself, alterations unfold within it and entail no references of the one monad to others. What is taken in real determination to be an actually existent reference of monads to each other is an independent, only *simultaneous*, becoming which is enclosed in the being-for-itself of each. – That there is a *plurality* of monads, that they are thereby determined as others, is not

[67] Nicolas Malebranche, *Oeuvres de Malebranche*, vol. III, *Recherche de la vérité: Eclaircissements*, ed. Geneviève Rodis-Lewis (Paris: Vrin, 1964), elucidation 10, p. 136. English trans. *The Search after Truth: Elucidations*, trans. and ed. Thomas M. Lennon (Cambridge: Cambridge University Press, 1997), p. 617.

[68] Leibniz, *Monadology*, §§1–4. [69] Leibniz, *Monadology*, §14.

the affair of the monads but of a reflection external to them, of a third; *in themselves* they are not *others to each other*; the being-for-itself is kept pure, without the *alongside* of an existence.[70] – But herein equally lies the incompleteness of this system. The monads are such ideating beings *only in themselves* or *in God*, who is the monad of monads, or also *within the system*. Otherness is present in the same manner; it happens wherever one wishes, in representation itself or according to how the third that considers them as others, as many, is determined. The plurality of their existence is only excluded, and that only momentarily, for the monads are posited as the non-others that they are only through abstraction. If it is a third that posits their otherness, so it is also a third that sublates this otherness; but this whole *movement that makes them idealizations* falls outside them. It may be pointed out to the contrary that this movement of thought happens itself only within an ideating monad. But the rejoinder must then be that the very *content* of such a thought is *within itself external to itself*. One proceeds immediately, without conceptualization (by means of the **21.150** image of creation), from the unity of the absolute ideality (the monad of monads) over to the categories of the abstract *plurality* (void of references) of existence, and from this plurality just as abstractly back to that unity. Ideality, representing in general, remains something formal, as does also representing raised to consciousness. Just as in Leibniz's above-mentioned fiction[71] – that of a magnetic needle which, if it had consciousness, would see its northerly direction as a determination of its freedom – consciousness is thought only as a one-sided form indifferent to its determination and content, so is the ideality in the monads a form that remains external to their plurality. Ideality is supposed to be immanent in them, their nature is to represent; but, on the one hand, they are in a relation of harmony, but a harmony that does not fall within their determinate being and is therefore pre-established;[72] on the other hand, this *existence* of theirs is not grasped as being-for-other, even less as ideality, but is rather determined only as abstract plurality; the ideality of the plurality and its further determination as harmony do not become immanent in the plurality itself, do not belong to it.

Other forms of idealism, as for example the idealism of Kant and Fichte, do not go beyond the *ought* and the *infinite progress* but remain in the dualism of existence and being-for-itself.[73] It is true that in these systems the thing-in-itself or the principle of infinite resistance immediately enters

[70] Leibniz, *Monadology*, §§7–9. [71] Cf. above, 21.122. [72] Leibniz, *Monadology*, §78.
[73] Kant (1788) AK 5.122; Fichte, *The Theory of Knowledge* (1794), pp. 230–231, GA I.2, 239.

into the "I" and becomes something only *for-it*; but it proceeds from a free otherness which perpetuates itself as negative being-in-itself. The "I" is therefore indeed determined as idealization, as a-being-for-itself, as infinite reference to itself; but the *being-for-one* is not completed to the point where the beyond of that in-itself, or the direction to the beyond, vanishes.

c. The one

Being-for-itself is the simple unity of itself and its moments, of the being for-one. There is only one determination present, the self-reference itself of the sublating. The *moments* of being-for-itself have sunk into
21.151 an *indifferentiation* which is immediacy or being, but an *immediacy* that is based on the negating posited as its determination. Being-for-itself is thus *an existent-for-itself*, and, since in this immediacy its inner meaning vanishes, it is the totally abstract limit of itself – *the one*.

Attention may be drawn in advance to the difficulties that lie ahead in the exposition of the *development* of the one, and to the source of these difficulties. The *moments* that constitute the *concept* of the one as being-for-itself occur in it *one outside the other*; they are (1) negation in general; (2) *two* negations that are, therefore, (3) *the same*, (4) absolutely opposed; (5) self-reference, identity as such; (6) *negative* reference which is nonetheless *self-reference*. These moments occur here apart because the form of *immediacy*, of *being*, enters into the being-for-itself as existent-for-itself; because of this immediacy, *each* moment is *posited* as *a determination existent on its own*, and yet they are just as *inseparable*. Hence, of each determination the opposite must equally be said; it is this contradiction that causes the difficulty that goes with the abstract *nature of the moments*.

B. THE ONE AND THE MANY

The one is the simple reference of being-for-itself to itself in which its moments have fallen together – in which, therefore, being-for-itself has the form of *immediacy* and its moments, therefore, are now *there as existents*.

As the self-reference of the *negative*, the one is a determining – and, as *self*-reference, it is infinite *self*-determining. However, because of the present immediacy, these *distinctions* are no longer only moments of one and the same self-determination but are at the same time posited as *existents*. The *ideality* of the being-for-itself as a totality thus turns at first into *reality* – a reality, moreover, of the most fixed and abstract kind, as a *one*. In the *one*, the being-for-itself is *the posited* unity of being and existence, as the absolute

union of the reference to another and the reference to itself; but also the determinateness of being then enters *into opposition* to the determination of the *infinite negation*, to self-determination, so that what the one is *in itself*, it *is* that now only *in it*, and the negative consequently is an other distinct from it. What shows itself to be *present* as distinct from the one is the one's own self-determining; its unity with itself, as thus distinct from itself, is demoted to *reference*, and, as *negative* unity, it is negation of itself as *other*, the *excluding* of the one as an *other* from itself, from the one. **21.152**

a. The one within[74]

Within it, the one just *is*; this, its being, is not an existence, not a determination as reference to an other, not a constitution; it is rather its having negated this circle of categories. The one is not capable, therefore, of becoming any other; *it is unalterable*.

It is indeterminate, yet no longer like being; its indeterminateness is the determinateness of self-reference, absolutely determined being; *posited in-itselfness*. As negation which, in accordance with its concept, is self-referring, it has distinction in it: it directs away from itself towards another, but this direction is immediately reversed, because, according to this moment of self-determining, there is no other to which it would be addressed, and the directing reverts back to itself.

In this simple immediacy, even the mediation of existence and ideality, and with it all diversity and manifoldness, have vanished. In the one there is *nothing*; this *nothing*, the abstraction of self-reference, is here distinguished from the in-itselfness of the one; it is a *posited nothing*, for this in-itselfness no longer has the simplicity of the something, but, as *mediation*, has rather the determination of being concrete; taken in abstraction, it is indeed identical with the one, but different from its determination. So this nothing, posited as *in the one*, is the nothing as the *void*. – The void is thus the *quality* of the one in its immediacy. **21.153**

b. The one and the void

The one is the void as the abstract self-reference of negation. But the void, as nothing, is absolutely diverse from the simple immediacy of the one, from the being of the latter which is also affirmative, and because the two stand in one single reference, namely to the one, their diversity is *posited*;

[74] *Das Eins an ihm selbst.*

however, as distinct from the affirmative being, the nothing stands as void *outside* the one as existent.

Being-for-itself, determined in this way as the one and the void, has again acquired an *existence*. – The one and the void have their negative self-reference as their common and simple terrain. The moments of being-for-itself come out of this unity, become external to themselves; for through the *simple* unity of the moments the determination of *being* comes into play, and the unity itself thus withdraws to *one* side, is therefore lowered to existence, and there it is confronted by its other determination standing over against it, negation as such and likewise as the existence of the nothing, as the void.

Remark

In this form of existence, the one is the stage of the category that made its appearance among the ancients as the *principle of atomism*, according to which the essence of things is the *atom* and the *void* (τὸ ἄτομον or τὰ ἄτομα καί τὸ χενὸν).[75] When developed in this form, abstraction has gained a greater determinateness than the *being* of Parmenides and the *becoming* of Heraclitus. As *high* as this abstraction rises in making this simple determinateness of the one and the void the principle of all things, by reducing the manifold of the world to this simple opposition and daring to derive knowledge of it from the latter, just as *easy* is it for figurative reflection to picture atoms *here* and the void *next to them*. It is no
21.154 wonder, therefore, that the atomistic principle has at all times held its own; the equally trivial and external relation of *composition* that must be added to it to attain the semblance of concreteness and multiplicity, is just as popular as the atoms themselves and the void. The one and the void are being-for-itself, the highest qualitative in-itselfness that has sunk to the most complete *externality*; immediacy, or the being of the one, since it is the negation of all otherness, is posited as no longer determinable and alterable; and in the presence of its absolute obduracy all determination, every manifold and every conjunction, therefore remains irreducibly external reference.

With the earliest thinkers, however, the atomistic principle did not remain in this externality but also had, besides its abstraction, a speculative determination inasmuch as the *void* was recognized as the *source of movement*, and this entails quite a different connection of atom and void than the mere juxtaposition and mutual indifference of these two determinations.

[75] Hegel is referring here to Democritus and Leucippus. For Democritus, see Diels and Kranz, Vol. II, 68B9.

That the void is the source of movement does not have the trivial meaning that something can only move into an empty space and not into an already occupied one, for in the latter it would find no room still left open; understood in this way, the void would be only the presupposition or the condition of movement, not its *ground*, and the movement itself would be presupposed as already there while the essential point, its ground, is forgotten. The view that the void constitutes the ground of movement contains the more profound thought that the ground of becoming, of unrest and self-movement, lies in the negative in general, which, in this sense, is however to be taken as the true negativity of the infinite. – The void is the *ground of movement* only as the *negative* reference of the one to its *negative*, to the one, that is, to its own self posited, however, as determinate existent.

For the rest, the other determinations of the ancients concerning the shape of the atoms, their position, the direction of their movement, are arbitrary and external enough; they therefore stand in direct contradiction to the fundamental determination of the atom. Physics, with its molecules **21.155**
and particles, suffers from its use of the atom, the principle of extreme externality, and therefore from an extreme lack of the concept, as does also the theory of state that starts from the singular will of individuals.

c. Many ones

Repulsion

The one and the void constitute the first existence of being-for-itself. Each of these moments has negation for its determination, and is posited at the same time as an existence. In accordance with this determination, the one and the void are each the *reference* of negation to negation as of an other to its other: the one is negation in the determination of being; the void, negation in the determination of non-being. Essentially, however, the one is only self-reference as referring *negation*, that is, it is itself the same as the void outside it is supposed to be. Both are, however, also *posited* as each an affirmative *existence* – the one as being-for-itself as such, the other as indeterminate existence in general – and each as referring to the other as to an *other existence*. Essentially, however, the being-for-itself of the one is the ideality of the existence and of the other; it does not refer to an other but only *to itself*. But inasmuch as the being-for-itself is fixed as the one, as *existent* for itself, as *immediately* present, its *negative* reference *to itself* is at the same time reference to *an existent*; and since the reference is just as much negative, that to which the being-for-itself refers remains

determined as an *existence* and as an *other*; as essentially *self*-reference, the other is not indeterminate negation like the void, but is likewise a *one*. The one is consequently a *becoming of many ones*.

Strictly speaking, however, this is not just a *becoming*; for becoming is a transition of *being* into *nothing*; the one, by contrast, becomes only a *one*. The one, as referred to, contains the negative as reference; it has this reference, therefore, *in it*. Hence, instead of a becoming, the one's own
21.156 immanent reference is, first, present; and, second, since this reference is negative and the one is at the same time an existent, the one repels itself from *itself*. This negative reference of the one to itself is *repulsion*.

This repulsion, as thus the positing of *many ones* but through the one itself, is the one's own coming-forth-from-itself, but to such outside it as are themselves only ones. This is repulsion according to the *concept*, as it exists implicitly *in itself*. The second repulsion is distinguished from it. It is the one that first occurs to the representation of external reflection, not as the generation of ones but only as the mutual holding off of ones which are presupposed as already *there*. To be seen now is how the first repulsion that exists *in itself* determines itself as the second, the external repulsion.

We must first establish the determinations that the many ones have as such. The becoming of the many, or their being produced, immediately vanishes as the product of a positing; what is produced are the ones, not for another, but as infinitely referring to themselves. The one repels only *itself* from itself; it does not come to be but *it already is*; that which is represented as the repelled is equally a *one*, an *existent*; repelling and being repelled applies in like manner to both, and makes no difference.

The ones are thus *presupposed* with respect to each other – *posited* through the repulsion of the one from itself; *pre*-supposed, posited as *non*-posited; their being-posited is sublated, they are *existents* with respect to each other, such as refer only to themselves.

Thus plurality appears not as an *otherness*, but as a determination completely external to the one. The one, in repelling itself, remains reference to itself, just like that which is taken as repelled at the start. That the ones are *other* to one another, that they are brought together in the determinateness of plurality, does not therefore concern the one. If the plurality were a reference of the ones to one another, the ones would then limit each other and would have the being-for-other affirmatively in them. Their connecting reference (and this they have through their unity which is *in itself*), as *posited* here, is determined as none; it is again the previously posited *void*. This void is their limit, but an external limit in which they are not
21.157 supposed to be *for one another*. The limit is that in which the limited *are*

just as much as are not; but the void is determined as pure non-being, and this alone constitutes the limit of the ones.

The repulsion of the one from itself is the making explicit of what the one is implicitly in itself; but, thus laid out as *one-outside-the-other*, infinity is here an *infinity that has externalized itself*, and this it has done through the immediacy of the infinite, of the one. Infinity is just as much the simple reference of the one to the one as, on the contrary, the one's absolute lack of reference; it is the former according to the simple affirmative reference of the one to itself; it is the latter according to the same reference as negative. Or again, the plurality of the ones is the one's own positing of the one; the one is nothing but the *negative* reference of the one to itself, and this reference – hence the one itself – is the plural one. But equally, plurality is utterly external to the one, for the one is precisely the sublating of otherness; repulsion is its self-reference and simple equality with itself. The plurality of the ones is infinity as a contradiction that unconstrainedly produces itself.

Remark

Mention was previously made of Leibnizian idealism.[76] It can here be added that that idealism proceeded from the *ideating monad*, which is determined as being-for-itself, only up to the repulsion just considered, and indeed, only up to *plurality* as such in which the ones are each only for itself, indifferent to the existence and the being-for-itself of the others, or in which, quite in general, the others are not for the one. The monad is for itself the entirely closed-in world; it needs none of the others; but this inner manifoldness which it possesses in its ideating activity alters nothing in its determination as being for itself. Leibnizian idealism takes up *plurality* immediately as *something given*; it does not conceptualize it as a *repulsion* of monads; it has plurality, therefore, only on the side of its abstract externality. *Atomism* lacks the concept of ideality; it does not grasp the one as containing *in it* the two moments of being-for-itself and being- **21.158**
for-it; it does not grasp it, therefore, as idealized, but only as simple, dry, being-for-itself. It does, however, go beyond mere indifferent plurality; the atoms do come to a further determination with respect to each other even though, if the truth be told, inconsequentially; whereas, on the contrary, in that indifferent independence of the monads plurality remains as a rigid *fundamental determination*, so that the reference connecting them falls only in the monad of monads, or in the philosopher who contemplates them.

[76] Cf. above, 21.149.

C. REPULSION AND ATTRACTION

a. Exclusion of the one

The many ones are each a being; their existence or their reference to one another is a non-reference, it is external to them: the abstract void. But they themselves are now this negative reference to themselves as to existent others: the demonstrated contradiction, the infinity posited in the immediacy of being. With this, repulsion now *finds immediately before* it that which is repelled by it. In this determination, it is an *excluding*; the one repels from itself only the many not generated by it, the ones not posited by it. This repelling is mutual or from all sides – relative, limited by the being of the ones.

Plurality is not at first posited otherness; limit is only the void, only that in which the ones *are not*. But in the limit they also *are*; they are in the void, or their repulsion is their *common connecting reference*.

This mutual repulsion is the posited *existence* of the many ones; it is not
21.159 their being-for-itself, in accordance with which they would be distinguished as many only in a third, but is rather their own distinguishing which preserves them. – They mutually negate themselves, posit one another as being only *for-one*. But at the same time they negate this *being only for-one* just as much; they *repel* the *ideality* that they have and *are*. – So the moments which in ideality are absolutely united come apart. In its being-for-itself, the one is also *for-one*; but this one, for which it is, is itself; its distinguishing from itself is immediately sublated. But in the plurality the distinguished one has a being; the being-for-one as has been determined in exclusion is therefore a being-for-other. Each thus comes to be repelled by an other, is sublated and made into a one which is not for itself but for-one, and an other one at that.

The being-for-itself of the many ones thus shows itself to be their self-preservation through the mediation of their mutual repulsion in which they sublated themselves reciprocally and posit the others as mere being-for-another. But the self-preservation consists at the same time in repelling this ideality and positing the ones as not being for-an-other. This self-preservation of the ones through their negative reference to one another is, however, rather their dissolution.

The ones not only *are* but maintain themselves through their reciprocal exclusion. First, it is in their *being*, and indeed their *being-in-itself* as contrasted with their reference to the other, that they should now have a firm point of support for their diversity as against their being negated; this

in-itselfness rests on their being *ones*. But they *all are this*; in their being-in-itself, instead of having there their firm point of support for their diversity, they are all *the same*. Second, their existence and their way of relating to one another, that is, their *positing themselves as one*, is their reciprocal negating; this, however, is likewise *one and the same* determination of all through which they therefore posit themselves as identical; just as, by being in themselves the same, the ideality that should be posited in them through others is *their own*, and they thus repel just as little. – According to their being and positing, they are, consequently, only *one* affirmative unity. **21.160**

This consideration regarding the ones – that from either side of their determination, whether they just are or refer to one another, they show themselves to be only one and the same, indistinguishable – is a comparison that belongs to us. – Also to be seen, therefore, is what is *posited* in them in their mutual *reference* itself. – They *are* – this much is presupposed in this *reference* – and they are only inasmuch as they negate themselves reciprocally and at the same time keep away this ideality, their being negated, from themselves, that is, they negate the reciprocal negating. But they are only inasmuch as they negate, and so, since their reciprocal negating is negated, their being is negated. To be sure, since they *are*, nothing would be negated through this negating which for them is only something external; this negating of the other rebounds off them, coming their way only by striking their surface. And yet, they turn back upon themselves only by negating the others; they are only as this mediation, this turning back of theirs is their self-preservation and their being-for-itself. Since their negating is ineffectual because of the resistance offered by the others, whether as existents or as negating, they do not return back to themselves, do not preserve themselves, and so are not.

It was previously remarked that the ones themselves are each a *one* like any other.[77] This is not just a matter of our connecting them by way of reference, of bringing them together externally; repulsion is itself a referring; the one that excludes the ones refers itself to them, to the ones, that is, to itself. The negative relating of the ones to one another is consequently only a *coming-together-with-oneself*. This identity in which their repelling crosses over is the sublation of their diversity and externality which they should have rather asserted with respect to each other by excluding each other.

This self-positing-in-a-one of the many ones is *attraction*.

[77] Cf. above, 21.159.

Remark

Driven to the extreme of the one as being-for-itself, self-subsistence is an abstract, formal self-subsistence that destroys itself. It is the ultimate, most stubborn error, one which takes itself as the ultimate truth, whether it assumes the more concrete form of abstract freedom, of pure "I," and further still of evil. It is the freedom which so misconceives itself as to place its essence in this abstraction, and, in thus shutting itself up within itself, flatters itself that it attains itself in all purity. This self-subsistence, to determine it further, is the error of considering its own essence negatively and of relating itself to it negatively. It is thus a negative relating to itself which, while wanting to gain its own being, destroys it – and this, his doing, is only the manifestation of the nullity of the doing. Reconciliation
21.161 is the recognition that that towards which the negative relating is directed is rather its essence, and this is only in the *desisting* from the negativity of *its* being-for-itself rather than in holding fast to it.

It is an ancient proposition that *the one is many* and especially that *the many is one*. It should again be observed in this connection that, as expressed in propositions, the truth of the one and the many appears in inadequate form; such a truth is to be grasped and expressed only as a becoming, as a process, a repulsion and attraction – not as being, in the way the latter is posited in a proposition as inert unity. Earlier mention was made recalling Plato's dialectic in the *Parmenides* on the derivation of the many from the one, specifically from the proposition: the one is.[78] It is the internal dialectic of the concept that has been expounded; it is easiest to grasp the dialectic of the proposition, *that the many is one*, as external reflection; and, inasmuch as the subject matter also, *the many*, is a mutual externality, reflection may indeed be external here. This comparison of the many with one another immediately shows that each is absolutely determined just as any other; each is a one, each a one of many; each is by excluding the others – so that they are absolutely the same; absolutely one determination is present. This is a *matter of fact*, and all that needs to be done is simply to grasp the fact. If in its stubbornness the understanding refuses to do it, it is only because it *also* has distinction in mind, and rightly so; but distinction is not left out because of that fact, as surely as the fact is no less there despite distinction. One could, as it were, reassure the understanding concerning this simple grasp of the fact of unity that distinction will also come in again.

[78] Cf. above, 21.87.

b. The one one of attraction

Repulsion is the fragmentation of the one, first into the many of which it is the negative relating, since they presuppose each other as each existent; it is only the *ought* of ideality; this ideality will, however, be realized in attraction. Repulsion passes over into attraction, the many ones into one one. Both, repulsion and attraction, are at first distinguished from each other, repulsion as the reality of the ones, attraction as their posited ideality. Attraction refers to repulsion by having it for a *presupposition*. Repulsion **21.162**
delivers the material for attraction. If there were no ones, there would be nothing to attract; the representation of continuing attraction, of the consumption of the ones, presupposes an equally continuing generation of the ones; the sense representation of spatial attraction gives continuity to the flow of ones to be attracted; to replace the atoms that vanish at the point of attraction, another multitude comes forth from the void, infinitely if one so wishes. If attraction were represented as accomplished, that is, the many as brought to the point of the one one, the result would be just an inert one, no longer any attraction. The ideality immediately present in attraction still also has in it the determination of the negation of itself, the many ones to which it refers; attraction is inseparable from repulsion.

To attract pertains at first in equal measure to each of the many ones as *immediately* present; none has advantage over an other; what would result then is an equilibrium in the attraction, or more precisely, an equilibrium in the attraction and the repulsion themselves, and an inert state of rest without any ideality present there. But there can be no question here of any such immediately present one taking precedence over another, for this would presuppose a determinate distinction between them; attraction is rather the positing of the given lack of distinction among the ones. Attraction is itself the *positing* in the first place of a one distinct from other ones; these are only the immediate ones that are to preserve themselves through repulsion; through their posited negation, however, what proceeds is the one of attraction which is therefore determined as the mediated one, the one *posited as one*. The first ones, as immediate, do not in their ideality return into themselves, but have this ideality each in another.

The one one is, however, ideality that has been realized, posited in the one; it attracts through the mediation of repulsion; it contains in itself this mediation as *its determination*. It thus does not swallow the attracted ones within it as into one point, that is, does not sublate them abstractly. Since it contains repulsion in its determination, the latter equally preserves the ones as many within it; by its attracting, it musters, so to speak, something

before it, gains an area or a filling. Thus there is in it the unity of repulsion and attraction in general.

c. The connection of repulsion and attraction

The difference of the *one* and the *many* has determined itself as a difference of their mutual *reference connecting them* which breaks down into two, repulsion and attraction, each of which stands at first outside the other
21.163 on its own, in such a way that the two are essentially joined together nevertheless. Their still indeterminate unity must be brought out in greater detail.

As the fundamental determination of the one, repulsion appears first, and it appears as *immediate*, like its ones which are indeed generated by it and yet are at the same time posited as immediate, and it is therefore indifferent to the attraction which is added to it externally as thus presupposed. Rather, attraction is not presupposed by repulsion: it is not supposed to have any part in the positing and in the being of the latter, that is, as if repulsion were not, already in it, the negation of itself, or the ones were not already negated in it. In this way, we have repulsion in abstraction, by itself, and attraction likewise holds out to the ones, as *each an existent*, the side of an immediate existence which comes to them by itself as an other.

If we take mere repulsion in this way, for itself, it is then the dispersion of the many ones in indeterminacy, outside the sphere of repulsion itself; for repulsion is the negating of the connection of the many to one another; lack of connection is their determination when abstractly taken. But repulsion is not just the void; the ones, although unconnected, do not repel what constitutes their determination, do not exclude it. Although negative, repulsion is nonetheless essentially *connection*; the mutual repulsion and flight is not a liberation from what is repelled and fled from; that which is excluded still stands in *connection* with what is excluded from it. But this moment of connection is attraction, which is thus within repulsion itself; it is the negating of that abstract repulsion by which the ones would each be an existent referring only to itself without mutual exclusion.

But in starting with the repulsion of the ones as immediately present there, and with attraction consequently also posited as intruding on them externally, the two, repulsion and attraction, are held apart as diverse determinations despite their inseparability. But it has been established that it is not just repulsion which is presupposed by attraction, but that there equally is present also a reverse connection of repulsion to attraction, and that repulsion no less has attraction for its presupposition.

As thus determined, they are inseparable, and at the same time each is determined as an ought and a limitation with respect to the other. Their ought is their abstract determinateness as each an *existent in itself* – a determinateness, however, which is thereby directed beyond itself and refers to the *other*. And so, through the mediation of the *other*, each is as *other*; their self-subsistence consists in their being mutually posited in this mediation as an *other* determining. – Thus, repulsion is the positing of the many; attraction the positing of the one; this latter is equally the negation of the many and the former the negation of the ideality of such a many in the one; so that attraction too is attraction only *through the mediation* of repulsion, just as repulsion is repulsion through the mediation of attraction. In all this, however, the mediation of each with itself through the *other* is **21.164** in fact negated; each of the two determinations is its own self-mediation. This will result from a closer examination of the two determinations and will bring us back to the unity of their concept.

In the first place, that each presupposes *itself*, that in its presupposition each refers only to itself, this is already present in the way the still relative repulsion and attraction behave at first.

Relative repulsion is the mutual repulsion of many ones which are *already at hand*, supposedly immediately given. But that there be many ones, this is repulsion itself; any presupposition that it would have is only its own positing. Moreover, the determination of the *being* that would accrue to the ones apart from their being posited – whereby they would *already* be – belongs likewise to repulsion. Repelling is that through which the ones manifest themselves and maintain themselves as ones; through which they *are* as such. Their being is their repulsion itself, which is thus not some relative existence against another other but relates itself throughout only to itself.

Attraction is the positing of the one as such, of the real one, with respect to which the existence of the many is determined as only a vanishing idealization. Attraction thus directly presupposes itself; it presupposes itself in the determination namely, of the many ones to be an idealization, the same ones which are otherwise supposed to have existence for themselves and to repel *others*, including therefore any other that attracts. Against this determination of repulsion, the ones do not attain ideality only through the relation to attraction; on the contrary, the ideality is presupposed: it is the ideality of the ones as an existent *in itself*, inasmuch as they, as ones (including the one conceived as attracting), are not distinguished from one another but are one and the same.

This self-presupposing of the two determinations, each for itself, implies further that each contains within itself the other as moment.

Self-presupposing in general is the positing of oneself in a one as the *negative* of oneself (repulsion), and what is presupposed in this positing is the same as that which presupposes (attraction). That each is *in itself* only a moment, this is the transition of each from itself into the other, the negation of itself in the other and the positing of itself as the other of itself. The one, as such, is thus a coming-out-of-itself; is itself only the positing of itself as its other, as the many. And the many, for its part, is only the falling back upon itself and the positing of itself as its other, as a one, and is in this equally only the connecting of itself to itself, each continuing itself in its other. Therefore, the coming-out-of-itself (repulsion) and the self-positing-as-one (attraction) are already inherently present as undivided. But in the repulsion and attraction which are relative, that is, which presuppose immediate, *determinedly existent* ones, it is *posited* that
21.165 the two are each, within it, this negation of itself, and consequently also the continuity of itself in its other. The *repulsion* of the determinedly existent ones is the self-preservation of the one through the mutual holding off of the others, so that (1) the other ones are negated *in it* (this is the side of its existence or of its being-for-another and is therefore attraction as the ideality of the ones); and (2) the one is *in itself*, without reference to the others (however, not only has the in-itself in general long since passed over into being-for-itself; the one *in itself*, according to its determination, is the coming to be of many). – The *attraction* of the existent ones is their ideality and the positing of the one, and in this, as both the negating and the producing of the one, attraction sublates itself, and as a positing within it of the one, is the negative of itself: it is repulsion.

With this, the development of being-for-itself is completed and has attained its result. In connecting itself *to itself infinitely*, that is, as the posited negation of negation, the one is the mediation by which it repels itself as its absolute (that is, abstract) *otherness* (the many) from itself, and in thus *negatively* connecting itself to this, its non-being, it sublates it and is in it precisely only the connection to itself. The one is only this becoming in which the determination "it *begins*," that is, its being posited as an immediate existent, and equally that, as result, it has restored itself as the one, that is, the equally *immediate* and exclusive one, have vanished; the process which it is, posits and contains it from all sides only as something sublated. The sublation, determined at first only as a relative sublating of the *connection* to another existent, a connection which is therefore itself not an indifferent repulsion and attraction, equally proves itself to pass over into the infinite connection of mediation through the negation of the external connection of immediate and determinate existents, and to have for result

precisely that becoming which, in the instability of its moments, is the collapse, or rather the going-together-with-itself, into simple immediacy. This being, according to the determination which it has now *acquired*, *is quantity*.

If we briefly review the moments of this *transition of quality into quantity*, we find that the qualitative has being and immediacy for its fundamental determination, and the limit and the determinateness are in this immediacy so identical with the being of something, that the something itself vanishes along with its alteration; as thus *posited*, it is determined as finite. Because of the immediacy of this unity in which the *distinction* has disappeared, although it is *implicitly* present in the unity of *being* and *nothing*, the **21.166** distinction falls *outside* that unity as *otherness* in general. This reference to the other contradicts the immediacy in which qualitative determinateness is self-reference. This otherness is sublated in the infinity of the being-for-itself, the being-for-itself that has realized the distinction implicitly present in it in the negation of negation: has realized it as the one and the many and as their connecting references, and has also elevated the qualitative to true unity, that is, a unity which is no longer immediate but posited as accordant with itself.

This unity is, therefore, (α) *being*, only as *affirmative*, that is, *immediacy* self-mediated through the negation of negation: being is posited as a unity *permeating* its determinacies, limits, etc., which are posited in it as sublated; (β) *existence*: in this determination it is negation or determinateness as moment of the affirmative being; yet this determinateness is no longer immediate but reflected into itself, refers not to another but to itself; absolutely-determined-being, absolute in-itselfness, the one; otherness as such is itself being-for-itself; (γ) *being-for-itself*: as that being which persists across the determinateness and in which the one and even the being-determined-in-itself are posited as sublated. The one is simultaneously determined as having gone beyond itself and as *unity*; the one, the absolutely determined limit, is consequently posited as a limit which is none, a limit which is in being but is indifferent to it.

Remark

Attraction and repulsion, as is well known, are usually regarded as *forces*. We must now compare this determination of them, and the relations connected with it, with the way we have just conceived them. – Regarded as forces, they are treated as self-standing and therefore not as referring to each other by nature, that is, not as each only a moment that should pass over into its opposite but as each persisting instead in opposition to the

other. They are represented, moreover, as joining in a *third*, in *matter* – in such a way, however, that this unification does not count as their truth but each counts rather as a first, as an existent in and for itself: it is matter or the determinations of matter which are rather posited and produced through
21.167 them. When it is said that matter *has* these two forces *in itself*, this unity which they have in matter is understood as an association within which they are at the same time presupposed to remain independent existents, free of each other.

Kant famously *constructed matter from the forces of repulsion and attraction* or at least, as he put it himself, displayed the metaphysical element of such a construction.[79] – It will not be without interest to examine this construction more closely. This *metaphysical* exposition of a subject matter which not only itself, but in its determinations, seemed to belong to *experience* is remarkable in part because, as a conceptual experiment, it gave at least the impetus for the modern philosophy of nature (a philosophy which does not make nature the foundation of science as something given to perception through the senses but discerns its determinations in the absolute concept); in part also because that Kantian construction is still deeply entrenched and held as a philosophical beginning and the foundation of physics.

Now it is true that, as it exists for the senses, matter is not a subject of logic, no more than space and spatial determinations are. Nevertheless, the forces of attraction and repulsion, when regarded as forces of sensuous matter, also have for a foundation the pure determinations of the one and the many here considered and their reciprocal connections, to which I have given the names of "repulsion" and "attraction" because these were the most readily available.

On closer inspection, Kant's procedure in the deduction of matter from these forces, which he calls a *construction*, does not deserve this name, unless any kind of reflection, even analytical reflection, be called a construction. And, to be sure, subsequent philosophers of nature have employed the name "constructing" for even the shallowest ratiocination and the most baseless concoction of unbridled imagination and thoughtless reflection, and the so-called factors of attraction and repulsion have especially been used as favorites everywhere.

For Kant's procedure is at bottom *analytical*, not constructive. *It presupposes the representation of matter* and then asks which forces belong to it in order to obtain its presupposed determinations. Thus, on the one hand, he demands the force of attraction because *through repulsion alone*,

[79] Kant (1786), AK 4.498.

without attraction, *no matter could exist in fact* (*Metaphysical Foundations of Natural Science*, pp. 53ff.).[80] On the other hand, he equally derives repulsion from matter, and gives as the reason for it that *we represent matter as impenetrable*, since it is in this determination that matter presents itself **21.168**
to the *sense of touch* through which it reveals itself to us. Consequently, he proceeds, repulsion is directly thought in the *concept* of matter, for it is immediately *given* together with it; attraction, by contrast, is added to it by way of *inferences*. These inferences, however, also rest on what has just been said, namely, that a matter that had merely repulsive force would not exhaust what we mean by matter.[81] – This is, as is lucidly clear, the procedure of a cognition that reflects upon experience, begins by *perceiving* determinations in appearance, then lays them down as a foundation and, for a so-called *explanation* of them, assumes corresponding *basic elements* or *forces* that supposedly produce those determinations of appearance.

As regards this distinction just mentioned in the way cognition finds repulsion and attraction in matter, Kant further observes that the force of attraction does not any the less *belong* to the *concept* of matter, "*although it is not contained in it*." Kant stresses these last words. But it is difficult to see just where the distinction would lie, for a determination that belongs to the *concept* of a fact *must* in truth *be contained in it*.[82]

What causes the difficulty and gives rise to this hollow subterfuge is that from the start Kant one-sidedly attributes to the concept of matter only the determination of *impenetrability* which we are supposed to *perceive* by *touch*, for which reason the force of repulsion as the holding off of an other from oneself is said to be given immediately. But then, if it is further said that matter cannot *be there* without the force of attraction, this claim is based on a representation of matter drawn from perception; the determination of attraction must, therefore, also be met with in perception. And one can well perceive that, besides its being-for-itself which sublates the being-for-other (yields resistance), matter also possesses the *existent's connection with itself*; it possesses spatial *extension* and *cohesion*, and a very stable cohesion indeed in rigidity and solidity. Physics explains that for the tearing apart etc. of a body there is required a force which is stronger than the reciprocal *attraction* of the body's parts. From this observation **21.169**
it is possible for reflection to infer *attraction* (or to assume it as *given*) just as immediately as it did for repulsion. In fact, if we examine Kant's inferences on the basis of which the force of attraction is to be derived (the

[80] Hegel's pagination refers to the 1786 edition. Cf. Kant (1786), AK 4.497ff.
[81] Kant (1786), AK 4.509. [82] Kant (1786), AK 4.509.

demonstration of the proposition that the possibility of matter requires a force of attraction as the second fundamental force, *loc. cit.*),[83] we find that they contain nothing except that through mere repulsion matter would not be *spatial*. In presupposing that matter fills space, one attributes to it the continuity for which the force of attraction is assumed to be the base.

Now even if such a so-called construction of matter had at most analytical merit, however diminished because of a flawed exposition, the thought on which it is based, namely that matter must be made out to be from these two opposing determinations as its fundamental forces, must always be highly esteemed. Kant is primarily concerned to banish the ordinary mechanistic ways of representation that stop at the one determination of impenetrability, *of existents that subsist point-like for themselves*, and reduce to something *external* the opposite determination, the internal *connection* of matter or of a plurality of matters that are in turn regarded as particular ones. These are ways of representation, as Kant says, that would not make room for any other motive force except pressure and thrust, that is, except through influence from outside.[84] This *externality* of cognition presupposes motion as always already externally *present* in matter; it does not occur to thought to grasp it as something internal, to conceive it as itself in matter, which for precisely that reason is assumed to be motionless and inert. This standpoint has in view only ordinary mechanics, not immanent and free motion. – While it is true that Kant sublates that externality by making attraction a *force of matter itself* – the attraction which is the reciprocal *connections* of matters inasmuch as these are assumed to be external to each other, or the connection of matter in general in its self-external-being – still, within matter, his two fundamental forces remain external, *independent of*
21.170 *each other*.

As null as is the independence attributed to these two forces from the standpoint of the said cognition, just as null must any other *would-be fixed* distinction made regarding their content show itself to be; for such forces, when seen as they truly are in the way we have just done, are only moments that pass over into each other. – I shall now consider these other distinctions as Kant gives them.

Thus, he defines the force of attraction as a penetrative force in virtue of which a matter can act on the parts of others even beyond the surface of contact; the force of repulsion, on the contrary, as a *surface force* by which matters can act on each other only in the shared surface of contact. The reason given for supposing that this latter force is only a surface one

[83] Kant (1786), AK 4.508. [84] Kant (1786), AK 4.510.

is as follows: "The parts in *contact* each limits the sphere of action of another, and the force of repulsion cannot move any more distant part except through the mediation of intervening parts; an immediate action of one matter upon another across these intervening parts by forces of expansion (this means here forces of repulsion) is impossible." (Cf. ibid., Explanations and Additions, p. 67.)[85]

But the immediate comment here is that in assuming "nearer" or "more distant" parts of matter the same *distinction* arises *with respect to attraction*, namely, granted that a first atom acts upon a *second*, this second atom would find itself between that first atom and a more distant *third* atom, and this third atom would then most directly fall within the sphere of attraction of the second atom lying closest to it between it and the first; the first atom would not therefore exercise an *immediate* simple action upon the third; it follows that the action of attraction would be just as mediated as that of repulsion; further, the *true penetration* of the force of attraction would have to consist only in this, that every part of matter is attractive *in and for itself*, not that a certain number of them behaves passively and only one atom **21.171** actively. – But more to the point, with respect to the force of repulsion itself, it must be observed that, in the cited passage, the parts are *in contact with each other*, presumably in the state of *compactness* and *continuity* of a *ready* matter which would not allow repulsion across itself. However, such a compactness of matter in which the parts are *in contact* with each other, no longer separated by the void, already presupposes that *the force of repulsion has been sublated*; in keeping with the sensuous representation of repulsion dominant here, we have to assume parts which, being in contact with each other, do not repel each other. It therefore follows, quite tautologically, that repulsion cannot have a place where its non-presence is being assumed. But there is nothing to be gained from this for a determination of the force of attraction. – However, if we reflect on what transpires, namely that parts in contact with each other touch each other to the extent that they still hold themselves *apart*, the implication is that the force of repulsion is not just on the surface of matter but within the sphere that was supposed to be only a sphere of attraction.

Kant further assumes that "through attraction matter *only occupies a space*, *without filling it*" (ibid.) and "since matter does not fill space through the force of attraction, the latter can act across *empty space*, for there is no intervening matter to set limits to it."[86] – This distinction is of much

[85] Hegel's pagination refers to the 1786 edition. Kant (1786), AK 4.516.
[86] Kant (1786), AK 4.516.

the same nature as the one mentioned above where a determination is supposed to belong to a subject without however being contained in it;[87] here matter is supposed only to *occupy* a space but not *fill* it. So there we have *repulsion*, if we stay at its first definition, according to which the ones repel each other and only negatively (which means here, *through empty space*) *connect with each other*. Here we have the *force of attraction* that instead keeps space empty; it *does not fill* space by connecting the atoms, that is, it *keeps the atoms* in reciprocal *negative connection*. – We see that here Kant unconsciously runs into what is implied by the nature of the fact; that he ascribes to the force of attraction precisely what in the first definition he ascribed to the opposite force. While he was busy firming up the distinction between the two forces, what happened is that the one force crossed over into the other. – So for Kant matter is supposed to *fill* space
21.172 through repulsion and through it empty space, which allows for *attractive force*, is consequently supposed to vanish. In fact, in sublating empty space, repulsion sublates the negative connection of the atoms or the ones, that is, their repulsion; that is, repulsion is determined as the opposite of itself.

Added to this blurring of distinctions there is the further confusion that, as we remarked at the beginning, Kant's presentation of the opposing forces is analytical; matter, which should first be derived from its elements, recurs through the whole exposition already set and constituted. The two forces, surface and penetrative, are assumed by definition to be the motive forces by virtue of which *matters* can be supposed act in one way or the other. – They are conceived here, therefore, not as forces through which matter would come to be in the first place but as forces through which matter, already in place, would only be moved. But in so far as we are speaking of forces through which different matters act upon one another and are in motion, this is quite another thing than the determination and the connection that such forces should have as moments of matter.

When further determined as *centripetal* and *centrifugal*, these forces generate the same opposition as they do as attractive and repulsive forces. They seem to harbor an essential distinction, since in their sphere there is a "one" that stays fixed, a center, and with respect to it the other "ones" do not behave as for themselves; the distinction between the two forces can therefore be linked to this presupposed distinction between the single "one" at the center and the other "ones" that do not stay fixed relatively to it. But now, in so far as such forces are used for explanatory purposes (in which function they are taken, as are also the forces of attraction and

[87] Cf. above, 21.168.

repulsion, in inverse quantitative ratio, so that the one increases as the other decreases), one should expect that the phenomenon of motion, for whose explanation they were assumed, and the phenomenon of their inequality, be precisely the result of *them*. But one need only take a look at the account of a phenomenon based on the opposition of these forces (any will do; for instance, the uneven speed of a planet in its orbit around its central body) to become immediately aware of the confusion that reigns in it, and the impossibility of sorting out the quantity of the two forces, with the result that the one force which in the explanation is assumed to be decreasing must always be taken just as well as increasing, and vice-versa. This is a point which, to be made obvious, would need a lengthier exposition than can be given here; but the minimum necessary will be addressed later in connection with the *inverse ratio*.[88] **21.173**

[88] Cf. below, 21.314–318.

SECTION II

Magnitude (Quantity)

The difference between quantity and quality has been indicated. Quality is the first, immediate determinateness. Quantity is the determinateness that has become indifferent to being; a limit which is just as much no limit; being-for-itself which is absolutely identical with being-for-another: the repulsion of the many ones which is immediate non-repulsion, their continuity.

Because that which exists for itself is now so posited that it does not exclude its other but rather affirmatively continues in it, it is then otherness, inasmuch as *existence* surfaces again on this continuity and its determinateness is *at the same time* no longer simple self-reference, no longer the immediate determinateness of the existent something, but is posited as repelling itself from itself, as referring to itself in the determinateness rather of an other existence (a being which exists for itself); and since they are *at the same time* indifferent limits, reflected into themselves and unconnected, determinateness is as such *outside itself*, an absolute *externality* and a something just as external; such a limit, the indifference of the limit as limit and the indifference of the something to the limit, constitutes the *quantitative* determinateness of the something.

In the first place, we have to distinguish *pure quantity* from quantity as *determinate*, from *quantum*. First, pure quantity is real being-for-itself turned back into itself, with as yet no determinateness in it: a compact, infinite unity which continues itself into itself.

Second, this quantity proceeds to determinateness, and this is posited in it as a determinateness that at the same time is none, is only external. Quantity becomes *quantum*. Quantum is indifferent determinateness, that is, one that transcends itself, negates itself; as this otherness of other-
21.174 ness, it lapses into *infinite* progress. Infinite quantum, however, is sublated indifferent determinateness: it is the restoration of quality.

Third, quantum in qualitative form is quantitative *ratio*. Quantum transcends itself only in general; in the ratio, however, it transcends itself into its otherness, in such a way that this otherness in which it has its

determination is at the same time posited, is another quantum. With this we have quantum as turned back into itself and referring to itself as into its otherness.

At the foundation of this relation there still lies the externality of quantum; it is *indifferent* quanta that relate themselves to each other, that is, they have the reference that mutually connects them in this being-outside-itself. The ratio is, therefore, only a formal unity of quality and quantity, and its dialectic is its transition into their absolute unity, in *measure*.

Remark

In something, its limit is as quality essentially its determinateness. However, if by limit we understand one which is quantitative and, for instance, a field alters its limit in this sense, then the field remains a field just as before. If, on the contrary, it is the qualitative limit of the field which is altered, what is altered is the determinateness that makes the field a field, and the field then becomes a meadow, a forest, and so on. – A shade of red, whether brighter or paler, is always red; but if its quality alters, then it ceases to be red and becomes blue, and so on. – The determination of *magnitude* as quantum just defined (as having for foundation a permanent being *which is indifferent to its determinateness*) is confirmed in every other example.

By the expression *magnitude* [or *Größe* in German], we understand *quantum* as in the given examples, not quantity [*Quantität*]; essentially for this reason this name drawn [in German] from a foreign language [*quantitas*] must be used. **21.175**

The definition of *magnitude* given in mathematics has likewise to do with quantum. A magnitude is normally defined as something that allows for *increase* or *decrease*. To increase, however, means to *magnify* the magnitude of something, to decrease, to *minimize* it. We have here a *difference* of magnitude as such from itself, as if it were magnitude that would allow its magnitude to alter. The definition thus proves itself to be awkward, for the very term is used in it that ought to be defined. To avoid using the same term in the definition, the *more* or *less*, the *magnifying* or *minimizing*, must be resolved into addition (an external affirmation, in keeping indeed with the nature of quantum) or subtraction (an equally external negation). The nature of *alteration* in quantum comes down in general to this *external* mode of both reality and negation. In that imperfect expression, therefore, one cannot fail to recognize the main point at issue, namely the indifference of the alteration: the concept of alteration itself implies its own "more and less," its indifference towards itself. **21.176**

CHAPTER I

Quantity

A. PURE QUANTITY

Quantity is sublated being-for-itself. The repelling one that behaved only negatively towards the excluded one, now that it has gone over in *connection* with it, behaves towards the other as identical to itself and has therefore lost its determination; being-for-itself has passed over into attraction. The absolute obduracy of the *one* has melted away into this *unity* which, however, as containing the one, is at the same time determined by the repulsion residing in it; as *unity of the self-externality*, *it is unity with itself*. Attraction is in this way the moment of *continuity* in quantity.

Continuity is therefore simple, self-same reference to itself unbroken by any limit or exclusion – *not*, however, *immediate* unity but the unity of ones which have existence for themselves. Still contained in it is the *outside-one-another* of *plurality*, though at the same time as something without distinctions, *unbroken*. Plurality is posited in continuity as it implicitly is in itself; the many are each what the others are, each is like the other, and the plurality is, consequently, simple and undifferentiated equality. Continuity is this moment of *self-equality* of the outsideness-of-one-another, the self-continuation of the different ones into the ones from which they are
21.177 distinguished.

In continuity, therefore, magnitude immediately possesses the moment of *discreteness* – repulsion as now a moment in quantity. – Steady continuity[1] is self-equality, but of many that do not become exclusive; it is repulsion that first expands self-equality to continuity. Hence discreteness is, for its part, a discreteness of confluents – of ones that do not have the void to connect them, not the negative, but their own steady advance and, in the many, do not interrupt this self-equality.

Quantity is the unity of these moments, of continuity and discreteness. At first, however, it is this continuity in the *form* of one of them, of

[1] *Stetigkeit*.

continuity, as a result of the dialectic of the being-for-itself which has collapsed into the form of self-equal immediacy. Quantity is as such this simple result in so far as the being-for-itself has not yet developed its moments and has not posited them within it. – Quantity *contains* these moments at first as being-for-itself posited in its truth. It was the determination of being-in-itself to be self-sublating self-reference, a perpetual coming-out-of-itself. But what is repelled is itself; repulsion is thus a creative flowing away from itself. On account of the sameness of what is repelled, this discerning is unbroken continuity; and on account of the coming-out-of-itself, this continuity is at the same time, without being broken off, a plurality – a plurality which persists just as immediately in its equality with itself.

Remark 1

Pure quantity has as yet no limit nor is it as quantum yet. And even inasmuch as it becomes quantum, it is not restricted by limit but consists rather precisely in not being restricted by limit, in having the being-for-itself as a sublated moment in itself. That discreteness is a moment in it can be expressed by saying that quantity is in it the ubiquitous *real possibility* of the one; that the one, conversely, is only simply as absolutely continuous.

To a *representation* not informed by the concept, continuity easily becomes *composition*, that is to say, an *external* reciprocal connection of ones in which the one is retained in its absolute obduracy and exclusiveness. But the one has shown itself to pass over into attraction in and for itself, into its ideality; it has shown that continuity, consequently, is not **21.178**
external to it but belongs to it and is grounded in its essence. But it is just this *externality* of continuity for the ones to which atomism clings, and representation has difficulty giving it up. – Mathematics, on the contrary, rejects a metaphysics that would make time *consist* of points of time; space in general, or the line in the first instance, of points of space; surface, of lines; the whole space, of surfaces. It gives no credit to such discontinuous ones. Even when it represents the magnitude of a surface, for instance, by determining it as the *sum* of infinitely many lines, this discreteness counts only as a momentary representation, for, since the space which such lines are supposed to constitute still is a restricted one, the sublation of their discreteness is already implicit in the *infinity* of the plurality.

It is this concept of pure quantity, as contrasted with a mere figurative representation of it, that Spinoza, for whom the concept had special importance, has in mind when he speaks of quantity as follows (*Ethics*, Part I, Proposition XV, note):

Quantitas duobus a nobis concipitur, abstracte scilicet sive superficialiter, prout nempe ipsam imaginamur; vel ut substantia, quod a solo intellectu fit. Si itaque ad quantitatem attendimus, prout in imaginatione est, quod saepe et facilius a nobis fit, reperietur finita, divisibilis et ex partibus conflata, si autem ad ipsam, prout in intellectu est, attendimus, et eam, quatenus substantia est, concipimus, quod difficillime fit, – infinita, unica et indivisibilis reperietur. Quod omnibus, qui inter imaginationem et intellectum distinguere sciverint, satis manifestum erit.[2]

If called for, more graphic examples of pure quantity can be drawn from space and time, also from matter in general, from light, and so forth, even from the "I" – provided that, as already noted, quantity is not understood as quantum. Space, time, and the rest, are extensions, pluralities; they are a going-out-of-self, a flowing that does not however pass over into the opposite, into quality or the one, but, as this coming-out-of-self, are rather a perennial *self-producing* of their unity. Space is this absolute *being-outside-itself* that is equally absolutely unbroken, a being-other over and over again which is self-identical; time is an absolute coming-out-of-itself, the generation of a one, of a point in time, a now which is immediately its coming-to-nothing and, again, the continuous coming-to-nothing of this vanishing; so that this self-generation of non-being is just as much simple
21.179 equality and identity with itself.

As regards the *matter* of quantity, there is one among the *seven* still extant *propositions* of Leibniz's first dissertation, the second, which goes as follows: *Non omnimo improbabile est, materiam et quantitatem esse realiter idem* (page 1 of Part I of his works).[3] – In fact, these concepts differ only to the extent that quantity is a pure thought determination, whereas matter is quantity in outer concrete existence. – The determination of pure quantity extends to the "I" as well, for the "I" is an absolute becoming-other, an infinite distancing or all-round repulsion that makes for the negative freedom of the being-for-itself which, however, remains absolutely simple continuity – the continuity of universality, of self-abiding-being

[2] "Quantity is conceived by us in two modes, abstractly or superficially, as we imagine it; or as substance, such as it is produced solely by the intellect. If we attend to quantity as it is in the imagination, which we often and more easily do, it will be found to be finite, divisible, and compounded of parts; but if we attend to it in accordance with the intellect, and we conceive of it as substance, which is very difficult to do, it will be found to be infinite, one, and indivisible. This will be plain enough to all, who know how to distinguish between the imagination and the intellect."

[3] "It is not altogether improbable that matter and quantity are in reality one and the same." Hegel is citing from the Dutens edition of Leibniz's works, *Gothofredi Guillelmi Leibnitii opera omnia* (Geneva, 1768). Cf. Leibniz (1763, 1880), p. 26. *Disputatio de principio individui*, in *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*, ed. C. J. Gerhardt (Berlin, 1875–1890), Vol. 4, p. 26.

interrupted by infinitely manifold limits, by the content of sensations, of intuitions, and so forth. – Those who resist taking *multiplicity as a simple unity* and, besides this concept, namely that each of the many is the same as every other, that is to say, that each is one of many (for at issue here is not the many as further determined as green, red, and so on, but of the many considered in-and-for-itself) – those who besides this also require a *figurative representation* of this unity, will find plenty of such representations in those continua that exhibit the deduced concept of quantity in simple intuition.

Remark 2

The dispute or the *antinomy of the infinite divisibility* of space, time, matter, and so on, has its origin in the nature of quantity, that it is this simple unity of discreteness and continuity.

This antinomy consists solely in the fact that discreteness must be maintained just as much as continuity. The one-sided claim of discreteness yields infinite or absolute *partition*, hence an indivisible, as principle; the one-sided claim of continuity yields infinite *divisibility* instead.

Kant's *Critique of Pure Reason* famously sets up *four* (cosmological) *antinomies*, the *second* of which deals with the antithesis to which the *moments of quantity* give rise.[4]

These Kantian antinomies will always remain an important part of Kantian philosophy. They, above all, caused the downfall of previous meta- **21.180**
physics and can be regarded as a main transition to more recent philosophy. For they were particularly instrumental in producing the conviction that the categories of finitude are null on the side of *content*, and this is a more correct approach than the formal approach of a subjective idealism for which their only defect is that they are allegedly subjective, not in what they are in themselves. However, despite its great service, Kant's exposition of these antinomies is very imperfect, both because it is internally awkward and eccentric and because of the inappropriateness of its result, which presupposes that cognition has no other forms of thought than finite categories. – In both respects, these antinomies deserve a more accurate critique, one that more closely clarifies its standpoint and method, and also extricates the main point at issue from the useless form into which it has been forced.

I remark, to begin with, that Kant wanted to give a semblance of completeness to his four antinomies by means of a principle of division which he

[4] For the following discussion, cf. A434/B462ff.

took from his schema of the categories. However, a more profound insight into the antinomial or, more accurately, into the dialectical nature of reason reveals that *every* concept is a unity of opposite moments to which, therefore, the form of antinomial assertions could be given. Becoming, existence, and the rest, and every other concept, could thus each yield its particular antinomy, and as many antinomies can therefore be devised as there are concepts. – Ancient skepticism did not spare itself any effort in pointing to this contradiction, the antinomy, in every concept which it encountered in the sciences.

Further, Kant did not pick the antinomy from the concepts themselves, but from the already *concrete* form of cosmological determinations. To capture it pure, and to deal with it in its simple concept, the thought determinations must not be taken as applied to, and entangled in, the representation of the world, space, time, matter, and so on, but must rather be considered purely in themselves, without this concrete material which has no force or authority here, for the thought determinations alone make up the essence and the ground of the antinomies.

Kant's conception of the antinomies is that they "are not sophistic artifices but contradictions reason must *run up against*." This last is a Kantian expression, and the view expressed is an important one. "As it
21.181 gains insight into the natural illusion of the antinomies, reason is indeed no longer duped by it but is still deceived."[5] – The critical solution, namely through the so-called transcendental ideality of the world of perception, has no other result than to make the so-called conflict into something *subjective* wherein, of course, the same illusion still persists just as undispelled as before. A true solution can only consist in that two determinations, in being opposed and yet necessary to one and the same concept, cannot have validity in their one-sidedness, each for itself, but have truth rather only in their sublated being, in the unity of their concept.

On closer inspection, the Kantian antinomies contain nothing more than the wholly simple categorical assertion *of each* of the two opposed moments of a determination, each on its own, *isolated* from the other. But this simple categorical, or more appropriately assertorical, claim is then enwrapped in a lopsided, disjointed scaffolding of argumentation that allegedly elicits the semblance of proof while in fact hiding and rendering unrecognizable the merely assertorical character of the claim, as closer examination will show.

[5] A421/B449.

The relevant antinomy here concerns the so-called *infinite divisibility of matter*, and rests on the opposition of the moments of continuity and discreteness that the concept of quantity contains within itself.

As presented by Kant, the *thesis* in these antinomies goes like this:

"*Every composite substance in the world consists of simple parts, and nothing exists anywhere except the simple or what is composed of the simple*."[6]

Here the *composite* is contrasted with the simple, the atom, and, as determination, takes second place to the unbroken or continuous. – The substrate given to these abstractions, namely these substances in the world, has no other meaning here than of things perceivable by the senses; it bears no influence on the antinomy itself, and could just as well also be called space or time. – Now since the thesis speaks only of *composition* instead of *continuity*, by that fact it is really an analytical or *tautological* proposition. That the composite is not one thing in and for itself but is something only externally put together, that it *consists of something other*, is its immediate determination. But this something other than the composite is the simple. It is therefore a tautology to say that the composite is made up of the **21.182** simple. – To ask what something consists of is to require the production of *something else*, the *compounding* of which constitutes that something. If ink is said to consist of ink again, the meaning of the question regarding the something else of which the ink consists is missed; the question is not answered but is simply repeated. The further question would then be whether that of which we speak *is supposed to consist of something* or not. But, as such, a composite is just that, an aggregate made up of something else. – If the simple which is said to be the other of the composite is taken to be only a *relatively simple* which, for itself, is composite in turn, then the question stands as before. Figurative representation has in view, say, only this or that composite, to which this or that something might also be assigned as *its* simple element, although for itself the latter is a composite. But at issue here is the *composite as such*.

Regarding now the Kantian *proof* of the thesis, like all the Kantian proofs of the remaining antinomial propositions, it takes an *apagogic detour* which will prove quite superfluous.

"Assume," so begins the proof, "that composite substances do not consist of simple parts; then, if *all* composition is *removed* in thought, no composite part remains and, since on the assumption just made there are no simple parts, there is also no simple part, thus nothing at all; consequently no substance would be given."[7]

[6] A434/B462. [7] A434/B462.

This conclusion is quite correct: if there is nothing but what is composite, and one thinks away all that is composite, nothing at all is left. – One will grant this. But one could spare oneself this tautological superfluity by starting the proof directly with its conclusion, namely:

"Either it is impossible to remove all composition in thought, or, after its removal, something must be left over that subsists without composition,
21.183 that is, the simple."[8]

"In the first case, however, the composite would not for its part consist of substances (*because with these the composition is only an accidental relation of substances*[i] *which, without such relation, must subsist as beings persisting on their own*). – Now, since this case contradicts the presupposition, there is left only the second, namely that any composition of substance in the world consists of simple parts."[9]

The very ground which is the main point and makes all that follows superfluous is laid down, by the way, in a parenthesis. The dilemma is this: either the composite persists or it does not and it is rather the simple that persists. If the first is the case, namely the composite persists, then what persists would not be substances, for *composition is to these only an accidental relation*; but substances are what persists; therefore, what persists is the simple.

Clearly the reason, *because* the composition is only an *accidental* relation of substances, a relation which is therefore external to them and does not concern the substances themselves, could have been immediately attached as proof to the thesis that the composite substance consists of simple parts without the apagogic detour. – If it is correct to say that the composition is accidental, then the essence is surely the simple. However, this accidentality on which everything depends is not proved but is assumed instead straight out, indeed casually in parenthesis, as something which is self-evident or irrelevant. True, it is self-evident that composition has the determination of accidentality and externality; but if we are to deal here with only an accidental aggregate instead of continuity, then it was not worth the effort to construct an antinomy over it, or, more to the point, none could be constructed; so the assertion that the parts are simple is then, as said, only a tautology.

We thus find already given in the apagogical detour the very assertion that should result from it. The proof can therefore be drawn more concisely this way:

[i] In addition to the redundancy of proof there is here also a redundancy of language – "because with these" (i.e. the substances) and "the composite is only an accidental relation of substances."

[8] A434/B462. [9] A434–436/B462–464.

Assume that substances do not consist of simple parts but are only composite. But now all composition can be removed in thought (for it is only an accidental relation); therefore, after its removal, no substances would be left over unless made up of simple parts. But we must have substances, since we have assumed them; we cannot have everything disappear before us but something must be left over, since we have presupposed something permanent that we call substance. This something must therefore be simple. **21.184**

For the sake of completeness, we also have to consider the conclusion which runs as follows:

"From this it directly *follows* that the things of the world are all simple beings; *that composition is only an external state of them*, and that reason must think the elementary substances as simple beings."[10]

Here we see the externality of composition, that is, its accidentality, being adduced as the *consequence* after it had earlier been introduced parenthetically in the proof and made use of.

Kant strongly protests that with the conflicting propositions of the antinomies he is not trying to trump up a trick, a proof of the kind (as it is said) that lawyers produce.[11] But the proof in question is not so much to be accused of trickery as it is of useless and strained complexity that only serves to conjure up the external form of a proof, thus to obscure the fact that the alleged conclusion is, parenthetically, the nerve of the proof, that there is no proof at all but only a presupposition.

The *antithesis* goes:

"*No composite thing in the world consists of simple parts and nowhere in the world exists something simple.*"[12]

The *proof* is likewise spun in apagogic form and is just as faulty as the previous one, though in a different way.[13]

"Assume," it says, "that a composite thing such as substance consists of simple parts. Because every *external relation*, and consequently also every composition made of substances, is possible only in *space*, the composite thing must consist of as many parts as the space that it occupies also consists in. Now space consists not of simple parts but of spaces. Therefore each part of the composite thing must occupy a space." **21.185**

"But the absolutely first parts of everything composite are simple."

"Therefore the simple occupies a space."

[10] A436/B464, paraphrase. [11] A430/B458. [12] A435/B463.
[13] For the texts immediately following, cf. A435/B463. Hegel is paraphrasing throughout.

"Now since every real thing that occupies a space holds within itself a manifold of mutually external parts, is thereby composed, and indeed of substances, it would follow that the simple is a composite substance – which is self-contradictory."

This proof can be called a whole *nest* (to use an expression elsewhere found in Kant)[14] of fallacious moves.

In the first place, the apagogical turn is a baseless illusion. For the assumption that *everything substantial is spatial*, but that *space does not consist of simple parts*, is a direct assertion which is made the immediate ground of what is to be proved, and with it the whole proof is already finished.

Next, this apagogical proof starts with the proposition, "every composition of substances is an *external* relation," but then, oddly enough, it immediately forgets it. For it goes on to argue that composition is only possible in *space*; but that space does not consist of simple parts; that, therefore, anything real that takes up a space is composite. But once composition has been assumed to be an external relation, just because of this the spatiality itself (in which alone composition is allegedly possible) is for the substances an external relation that is of no concern to them and does not affect their nature, just like anything else that can yet be derived from the determination of spatiality. For that very reason the substances ought not to have been posited in space.

It is further presupposed that the space in which the substances have been moved here does not consist of simple parts, since it is an intuition, that is, according to the Kantian definition, a representation which can only be given through one single object, and is not a so-called discursive concept. – The widespread nonsense regarding intuition that has grown out of this Kantian distinction between it and the concept is well known, and, in an effort to spare oneself the labor of conceptual comprehension, the value and the sphere of intuition have been extended to all cognition.

21.186 What is pertinent here is only this, that space, just like intuition itself, must also be *conceptualized* if one wants to comprehend conceptually at all. And thus the question arises whether space would not have to be conceptually grasped as consisting of simple parts, even though as intuition it is simple continuity, or whether space would not run into the same antinomy that applied only to substance. In actual fact, if the antinomy is abstractly framed, it applies, as we said,[15] to quantity in general and thereby equally to space and time.

[14] A609/B637. Kant's expression is directed at the cosmological proof of God's existence.
[15] Cf. above, 21.180.

But since it is assumed in the proof that space does not consist of simple parts, this should have been reason for not transposing the simple into this element which is incompatible with it. – Then there is also the clash between continuity of space and composition; the two are mixed together, the former being surreptitiously substituted for the latter (which results in the conclusion with a *quaternio terminorum*).[16] In Kant, space explicitly has the determination of being "one *single* space, its parts resting only on limitations, so that they do not come *before* the one all-encompassing space, as if they were *parts* of it from which a *composition* is possible" (*Cr. of Pure R.* 2nd edn, p. 39).[17] Continuity is quite rightly and unequivocally said of space here, as *opposed* to any composition made of parts. On the other hand, in the argument the transposing of substances into space is taken to entail "a manifold of externally *situated* parts" and, more particularly, "a composite thereby."[18] Yet, as quoted, the manner in which manifoldness is present in space is explicitly supposed to exclude component parts that antecede the composition and the unity of the space.

In the remark to the proof of the antithesis, another fundamental thesis of critical philosophy is expressly brought in, namely that we have a *concept* of bodies only as *appearances*; as such, however, they necessarily presuppose space, which is the condition of the possibility of all external appearances. If by substances only bodies are meant here, such as those which we see, feel, taste, and so on, then, strictly speaking there is no question of what they are in their concept; at issue are only sense perceptions. The proof of the antithesis, therefore, should have been briefly this: our whole experience, visual, tactile, and so on, shows us only what is composite; even the best microscopes and the keenest knives have yet to let us *hit upon* anything simple. Therefore, reason also should not expect to hit upon anything simple. **21.187**

If we then look into the opposition of this thesis and antithesis more accurately, freeing their proofs of all idle superfluity and oddity, we find that the proof of the antithesis, by transposing substances into space, dogmatically assumes *continuity*, just as the proof of the thesis, by assuming composition as the mode of connection of anything substantial, dogmatically assumes the *accidentality of this connection*, and consequently that substances are an *absolute one*. The whole antinomy thus comes down to the separation of the two moments of quantity and the direct assertion of the two, precisely as absolutely separated from each other. When considered from the standpoint of mere *discreteness*, substance, matter, space,

[16] A syllogism with four terms. [17] A24–25/B39. Hegel is only paraphrasing.
[18] Cf. A443/471.

time, and so on, are absolutely separate, their principle is the one. From the standpoint of *continuity*, this *one* is sublated; parting remains divisibility; it remains the *possibility* of parting, as possibility, without actually coming to the atom. Now, even if we stay with these oppositions as just defined, we see that the moment of atomicity lies in continuity itself, for continuity is the possibility of parting. And the said partition, the discreteness, also sublates every distinction of the ones (for the simple ones are each what the other is); it thereby equally contains their sameness and thus their continuity. Since each of the two opposed sides contains its other within itself, it follows that neither of these determinations, taken alone, has truth, but only their unity does. This is the true dialectical consideration of them, as well as the true result.

Infinitely more meaningful and more profound than this Kantian antinomy just considered are the dialectical examples of the ancient *Eleatic school*, especially those dealing with *movement*, which are likewise based on, and find their solution in, the concept of quantity.[19] To consider them here also would take us too far afield; they have to do with the concepts of space and time and can be dealt with in the history of philosophy in connection with them. – These examples do the greatest honor to the reason of their discoverers; they have the pure being of Parmenides for *result*, for they exhibit in them the dissolution of all determinate being and are thus in themselves the *flux* of Heraclitus. For this reason they also deserve
21.188 a more careful examination than the usual explanation that they are just sophisms. This is an assertion that sticks to empirical perception in the manner (which commonsense finds so illuminating) of a Diogenes who, when a dialectician pointed out the contradiction inherent in movement, is said not to have further strained his reason but, silently walking back and forth, deferred to the witness of the eyes[20] – a claim and refutation which is surely easier to make than to let oneself be drawn into thoughts and pursue the complications to which thought itself leads (indeed, not far-flung thought but the thought shaped in ordinary consciousness), resolving them by thoughts alone.

The solution that Aristotle gives to these dialectical tropes is contained in his truly speculative concepts of space, time, and movement, and merits high praise. The most famous of his proofs rest on opposing infinite divisibility (imagined as if it were actually carried out and hence as equivalent

[19] Cf. Aristotle, *Physics*, 239b5–240b7.

[20] See Diogenes Laertius, *Vitae philosophorum*, Vol. 1, edited by Miroslav Marcovich (Stuttgart: B. G. Teubner, 1999), book 6, §39; *Lives of Eminent Philosophers*, Vol. 2, translated by R. D. Hicks (Cambridge, MA: Harvard University Press, 1965).

to infinite partition, the atoms) to continuity, which applies just as well to time as to space, so that the infinite, that is, abstract plurality is contained in this continuity only *in itself*, as *possibility*. The actual as contrasted to abstract plurality and also to abstract continuity is the concreteness of these, space and time themselves, just as, in contrast to space and time, movement and matter are the concrete in turn. What is *abstract* has being only in itself or as possibility; it is only a moment of something real.[21] Bayle, who in his *Dictionary* (Article, "Zenon") finds Aristotle's solution to the dialectic of Zeno "*pitoyable*," does not understand what it means to say that matter is infinitely divisible only as *possibility*; his retort is that, if matter were divisible *in infinitum*, it would actually contain an infinite aggregate of parts and would be, therefore, not an infinite "*en puissance*," but an infinite that exists really and actually.[22] – On the contrary, *divisibility* itself is already only a possibility, not a *concrete existing of parts*, and plurality in general is posited in continuity only as moment, as sublated. – Sharpness of understanding, in which Aristotle is also surely unsurpassed, does not suffice to grasp and to pass judgment on his speculative concepts, no more than the said crudeness of sense-representation suffices to refute Zeno's argumentations. The understanding, however sharp, makes the mistake of holding such thought-fictions, such abstractions as an infinite aggregate of parts, to be a thing, something true and actual; but this sensuous consciousness **21.189** will not let itself be brought, beyond empirical content, to thoughts.

The Kantian resolution of the antinomy likewise consists only in supposing that reason should not *overstep sense perception*, and should take appearance as it is.[23] This solution ignores the content of the antinomy itself; it does not get to the nature of the *concept* of the terms that make it up, each of which, isolated by itself, is a nullity and in itself only the transition into its other, quantity being their unity and, in that unity, their truth.

B. CONTINUOUS AND DISCRETE MAGNITUDE

1. Quantity contains the two moments of continuity and discreteness. It is to be posited in both, in each as its determination. – It is already from the start the *immediate* unity of the two, that is, quantity is itself posited at

[21] *Physics*, 239b5–240b7.
[22] Pierre Bayle, *Dictionnaire historique et critique*, 3rd edn (Rotterdam, 1720), Vol. 4, 2909, note F; Slatkine Reprints (Geneva, 1969), Vol. 15, p. 39.
[23] Cf. *Critique of Pure Reason*, A702/B730.

first only in one of the two determinations, that of continuity, and as such is *continuous magnitude*.

Or continuity is indeed one of the moments of quantity which is brought to completion only with the other, discreteness. But quantity is concrete unity only in so far as it is the unity of *distinct* moments. These are to be taken, therefore, also as distinct, without however resolving them again into attraction and repulsion but, rather, as they truly are, each remaining in its unity with the other, that is, remaining *the whole*. Continuity is only the compact unity holding together as unity of the discrete; *posited* as such, it is no longer only moment but the whole quantity: *continuous magnitude*.

2. *Immediate* quantity is continuous magnitude. Quantity, however, is not as such an immediate; immediacy is a determinateness, the sublated
21.190 being of which is precisely quantity. Quantity is to be posited, therefore, in the determinateness immanent to it, and this is the one. Quantity is *discrete magnitude*.

Discreteness is, like continuity, a moment of quantity, but is itself also the whole quantity just because it is a moment in it, the whole, and therefore as distinct moment does not diverge from its unity with the other moment. – Quantity is the outsideness-of-one-another as such, and continuous magnitude is this outsideness-of-one-another onwardly positing itself without negation as an internally self-same connectedness. On the other hand, discrete magnitude is this outsideness-of-one-another as discontinuous, as broken off. With this aggregate of ones, however, the aggregate of atom and void, repulsion in general, is not thereby reinstated. Because discrete magnitude is quantity, its discreteness is itself continuous. Such a continuity in the discrete consists in the ones being the same as one another, or in that they have the same *unity*. Discrete magnitude is therefore the one-outside-the-other of the many ones *as of a same* – not the many ones in general, but posited rather as the *many of a unity*.

Remark

What is overlooked in the ordinary representations of continuous and discrete magnitude is that *each* of these magnitudes has both moments in it, continuity as well as discreteness, and that the distinction between them depends solely on which of the two is the *posited* determinateness and which is only implicit. Space, time, matter, and so on, are continuous magnitudes in that they are repulsions from themselves, each a flowing forth out of itself which is not, however, a going over, or a relating, to a qualitatively other. They possess the absolute possibility that the one may be posited in them anywhere. And this is not the empty possibility of a

mere otherness (as when one says that it would be possible for a tree to stand in the place of this stone). They contain in themselves, rather, the principle of the one; it is one of the determinations constituting them. **21.191**

Conversely, continuity is not to be overlooked in discrete magnitude; this moment, as indicated, is the one as unity.

Continuous and discrete magnitudes can be regarded as *species* of quantity inasmuch as the latter is posited under the *determinacies of its own* moments rather than under some external determinateness; the usual transition from genus to species allows *external* determinations to accrue to the genus according to a principle of division *external* to it. Moreover, continuous and discrete magnitudes are not yet quanta; they are quantity itself in one of its two forms. They are called magnitudes in some sense only, in so far as they have this in common with quantum – that they are a determinateness in quantity.

C. THE LIMITING OF QUANTITY

Discrete magnitude has, first, the one for its principle and, second, is a plurality of ones; third, it is essentially continuous, it is the one as at the same time sublated, as *unity*, the self-continuing as such in the discreteness of the ones. Consequently, it is posited as *one magnitude*, and the "one" is its determinateness – a "one" which, in this posited and determinate existence, *excludes*, is a limit to the unity. Discrete magnitude as such is not supposed to be immediately limited, but, when distinguished from continuous magnitude, it is an existence and a something, the determinateness of which, and in it also the first negation and limit, is the "one."

This limit, besides referring to the unity and being the moment of negation *in it*, is also, as one, *self-referred*; thus it *is* enclosing, encompassing limit. The limit here is not at first distinct from the something of its existence, but, as one, is essentially this negative point itself. But the being which is here limited is essentially as continuity, and in virtue of this continuity it transcends the limit, transcends this one, and is indifferent to **21.192** it. Real, discrete quantity is thus *one* quantity, or quantum – quantity as an existence and a something.

Since the one which is a limit encompasses within it the many ones of discrete quantity, it posits them equally as sublated in it; it is a limit to continuity simply as such and, consequently, the distinction between continuous and discrete magnitude is here indifferent; or, more precisely, it is a limit to the continuity of *the one* just as much as of *the other*; in this, *both* pass over into being quanta. **21.193**

CHAPTER 2

Quantum

Quantum, which *in the first instance* is quantity with a determinateness or limit in general, in its complete determinateness is *number*. *Second*, quantum divides first into *extensive quantum*, in which limit is the limitation of a determinately existent *plurality*; and then, inasmuch as the existence of this plurality passes over into being-for-itself, into *intensive* quantum or *degree*. This last is *for-itself* but also, as *indifferent limit*, equally *outside itself*. It thus has its determinateness in an other. *Third*, as this posited contradiction of being determined simply in itself yet having its determinateness outside itself and pointing outside itself for it, quantum, as thus posited outside itself within itself, passes over into *quantitative infinity*.

A. NUMBER

Quantity is quantum, or has a limit, both as continuous and discrete magnitude. The distinction between these two species has here, in the first instance, no significance.

As the sublated being-for-itself, quantity is already in and for itself indifferent to its limit. But, equally, the limit or to be a quantum is not thereby indifferent to quantity; for quantity contains within itself as its own moment the absolute determinateness of the one, and this moment, posited in the continuity or unity of quantity, is its limit, but a limit which
21.194 remains as the one that quantity in general has become.

This one is therefore the principle of quantum, but *as* the one *of quantity*. For this reason it is, first, continuous, it is a *unity*; second, it is discrete, a plurality (implicit in continuous magnitude or posited in discrete magnitude) of ones that have equality with one another, the said continuity, the same unity. Third, this one is also the negation of the many ones as a simple limit, an excluding of its otherness from itself, a determination of itself in opposition to *other* quanta. The one is thus (α) *self-referring*, (β) *enclosing*, and (γ) *other-excluding* limit.

Thus completely posited in these determinations, quantum is *number*. The complete positedness lies in the existence of the limit as a *plurality* and so in its being distinguished from the unity. Number appears for this reason as a discrete magnitude, but in unity it has continuity as well. It is, therefore, also quantum in complete determinateness, for in it the limit is the determinate *plurality* that has the one, the absolutely determined, for its principle. Continuity, in which the one is only *implicitly* present as a sublated moment – posited as unity – is the form of the indeterminateness.

Quantum, only as such, is limited in general; its limit is its abstract, simple determinateness. But as number, this limit is posited *as in itself manifold*. It contains the many ones that make up its existence, but does not contain them in an indeterminate manner, for the determinateness of the limit falls rather in it; the limit excludes the existence of other ones, that is, of other pluralities, and those which it encloses are a determinate aggregate: they are the *amount or the how many times*[24] with respect to which, taken as discreteness in the way it is in number, the other is the *unit*,[25] the continuity of the amount. *Amount* and *unit* constitute the *moments* of number.

Regarding amount, we must examine yet more closely how the many ones in which it *consists* are in the limit. It is rightly said of amount that it *consists* of the many, for the ones are not in it as sublated but *are* rather *present* in it, only posited with the excluding limit to which they are indifferent. But the limit is not indifferent to them. In the sphere of existence, the limit was at first so placed in relation to existence that the latter was left on **21.195** this side of its limit, standing there as the affirmative, while the limit, the negation, stood outside on the border of existence; similarly, with respect to the many ones, their being truncated and the exclusion of the remaining ones appears in them as a determination that falls outside the enclosed ones. But it was found in that sphere of existence that the limit pervades existence, that it extends so far as existence does, and that the something is for this reason limited by its very determination, that is, is finite. – Now, in the quantitative sphere, a number, say a hundred, is so represented that only the hundredth unit brings to the many the limit that makes them a hundred. In one respect this is correct; but, in another respect, none of the ones in the hundred has precedence over any other, for they are only equal; each is just as much the hundredth; they all thus belong to the limit that makes the number a hundred; this number cannot dispense with any of them for its determinateness; with respect to the hundredth, therefore, the

[24] "amount or the how many times" = *Anzahl*. [25] *die Einheit*.

rest do not constitute a determinate existence which is in any way different from it whether inside or outside the limit. Consequently, the number is not a plurality over against the limiting one that encloses it, but itself constitutes this delimitation which is a determinate quantum; the many constitute a number, *a* one, *a* two, *a* ten, *a* hundred, etc.

Now, the limiting one is a discriminating determinateness, the distinguishing of a number from other numbers. But this distinguishing does not become a qualitative determinateness; it remains rather quantitative, falling only within the compass of comparing, of *external* reflection; as one, number remains turned back onto itself and indifferent to others. This *indifference* of number to others is its essential determination; it constitutes *its being-determined-in-itself*, but at the same time also its *own exteriority*. – Number is thus a *numerical* one that is absolutely determined but which has at the same time the form of simple immediacy, and to which, therefore, the connecting reference to an other remains completely external. Further, as *numerical*, the one possesses the *determinateness* (such as consists in the *reference to other*) as a moment in it, in its *distinction of unit and amount*; and amount is itself the plurality *of the ones*, that is, this absolute exteriority is in the one itself. – This intrinsic contradiction of number or of quantum in general is the quality of quantum, and the
21.196 contradiction will develop in the further determinations of this quality.

Remark 1

Spatial magnitude and numerical magnitude are usually regarded as two species, in the sense that the former is as such just as much a determinate magnitude as the latter; their only difference, as is said, consists in the diverse determinations of continuity and discreteness; but as quantum they stand on the same level. In spatial magnitude geometry has, in general, continuous magnitude for its subject matter while the subject matter of arithmetic is discrete magnitude. However, with this disparity of subject matters they also have an inequality in the manner and the completeness of delimitation or determinateness. Spatial magnitude has only delimitation in general; when considered as an absolutely determined quantum, it requires number. Geometry as such does not *measure* spatial figures – is not an art of measuring – but only *compares* them. Even in its definitions, the determinations are sometimes drawn from the *equality* of the sides and angles, or from the *equality* of distance. The circle, for instance, does not require number, for it is based solely on the *equality* of the distance of all its possible points from a center point. These determinations, based on equality or inequality, are properly geometrical. But they are not sufficient, and

for other figures such as the triangle or the quadrangle, number is required, and number contains self-determinateness in its principle (the one) without the aid of an other and thus not through comparison. To be sure, in the point spatial magnitude possesses the determinateness that corresponds to the one; but this point, in being externalized, becomes an other, becomes a line; because it is essentially a one which is only *spatial*, in *connection* it becomes a continuity in which puncticity,[26] self-determinateness, the one, is sublated. To the extent that in self-externality the self-determinateness is to be retained, the line must be represented as an aggregate of ones, and the *limit* must receive the determination of *many* ones, that is, the magnitude of the line, and of the other spatial determinations as well, must be taken as number. **21.197**

Arithmetic treats number and its figures, or, more accurately, it does not treat them but rather operates with them. For number is indifferent, inert determinateness, such as must therefore be activated and brought into connection from *outside*. The modes of connection are the *species of calculation*. These are performed in arithmetic one after the other, and it is evident that each depends on the other even though the thread guiding their progression is not brought out in arithmetic. However, the systematization to which the textbooks are rightly entitled can easily be drawn from the conceptual determination of number itself. These guiding determinations will be briefly noted here.

Because of its principle, which is the one, number is in all instances an external aggregate, simply an analytical figure without any inner connectedness. And because it is thus produced only externally, all calculation is a generation of numbers, a *counting* or, *more precisely*, a *summing up*. Any diversity in this external production that always simply repeats itself can rest only on a difference in the numbers that are to be summed up; but any such difference must itself be imported from elsewhere as an external determination.

The qualitative difference that constitutes the determinateness of number is, as we have seen, that of *unit* and *amount*;[27] every conceptual determinateness possible in the operations of calculation is reduced, therefore, to these two. The difference, however, which accrues to numbers as quanta is external identity and external distinction, *equality* and *inequality*, and these are moments of reflection which we shall have to treat among the determinations of essence under the heading of "difference."[28]

[26] *Pünktlichkeit*. [27] Cf. above, 21.194. [28] Cf. 11.265ff.

We must also mention in advance that numbers can in general be generated in two ways, either by combining or by separating combinations already made; and, since both operations are performed with a species of counting which is determined in one and the same way, to the combining of numbers (an operation that can be called *positive*) there corresponds the separating of them (which can be called a *negative* operation). But the determination of the species of calculation itself is independent of this opposition.

1. After these preliminaries, we proceed with the details of the modes of calculation. The *first* generation of number is the combining of the many as such, each of which is posited as only a *one* – *numbering*. Since the
21.198 ones are external to each other, they are pictured in a sense image, and the operation by which number is generated is a reckoning on the finger tips, dots, etc. What four *is*, or five, can only be *indicated*. Since the limit is external, the breaking off point, how much is to be taken, is something accidental, arbitrary. – The difference of amount and unit that emerges in the progression of each species of calculation is the basis of a *system* of numbers (dyadic, decadic, and so forth); any such system rests totally on arbitrariness, on which amount is taken to count as the constant unit.

The *numbers* produced by counting are counted in turn, and, in thus being immediately posited, they are still determined without any reference connecting them to each other – indifferent to equality or inequality, their relative magnitude accidental, and hence *unequal* in general. This is *addition*. – We see that 7 and 5 make 12 by adding five more ones to the seven, on our finger tips or in some other way; and the result is then imprinted in memory *by rote*, for there is no internal constraint to the procedure. Similarly, we know that $7 \times 5 = 35$ by counting off on finger tips, etc. (by adding to one seven another seven and by repeating the operation five times), and the result is equally memorized. The labor of this counting, the ascertaining of the sums or the products, is relieved by ready-made addition or multiplication tables which one has only to learn by heart.

Kant regards the proposition, $7 + 5 = 12$ as synthetic (in the Introduction to the *Critique of Pure Reason*).[29] "One should," he says, "indeed think at the start (of course!) that it is an analytical proposition, one that derives from the *concept* of the *sum* of seven and five according to the principle of contradiction." The concept of the sum has no other meaning than this: that these two numbers are *requested* to be combined and, indeed because

[29] For the following, see B15–16.

they are numbers, externally combined, that is, in a way that is conceptually unconstrained or mechanically; that from seven one should go on counting until the ones to be added (their amount being fixed at five) have been exhausted; and the result carries the otherwise familiar name of twelve. "However," Kant continues, "if one considers the matter more closely, one finds that the concept of the sum of seven and five contains nothing more than the *union* of the two numbers into a single one, through which it is not at all *thought which* this single number is that comprehends the two of them"; "however much I might go on analyzing my concept of such a possible sum, I shall still not run across the number twelve." Of course, the transition from the set task to the result has nothing to do with *thinking* the sum or analyzing the concept. And Kant adds, "one must go outside these *concepts* and enlist the aid of intuition, of five fingers, etc., thus adding to **21.199** the *concept* of seven the units of the five *which is given in intuition*." Yes, five is given in intuition, that is, it is an entity put together in an entirely external fashion by the arbitrary repetition of the thought one; but seven is equally not a concept: there are no concepts here to go outside of. The sum of 5 and 7 is the conceptually unconstrained joining of the two numbers; one can call such a mechanical process of counting from seven onwards until the five ones have been exhausted an adding, a synthesizing, exactly like the counting from one onwards to five – a synthesizing, however, which is wholly analytical in nature, for the combination is only an artifact in which there is nothing, or to which nothing is added, which was not previously there in external fashion. The postulate that 5 be added to 7 stands to the postulate of counting in general in the same way as the postulate that a straight line be extended stands to the postulate of drawing a line.

Just as vacuous as the expression "to synthesize," is to say that this synthesizing takes place *a priori*. Counting is of course not a determination of the senses, which, according to Kant's definition of intuition, is all that is left over for the *a posteriori*, and it certainly is an affair conducted on the basis of abstract intuition, that is, one which is determined by the category of the one and where abstraction is made from all other sense determinations and no less so also from concepts. The *a priori* is something altogether all too vague; feeling, determined as drive, sense, and so on, has in it the moment of the *a priori*, just as much as space and time, in the concrete shapes of temporal and spatial existence, is determined *a posteriori*.

It can be added in this connection that Kant's claim about the synthetic character of the principles of pure geometry is equally without solid ground. He grants that several are really analytical, while giving as example in support of his claim that they are synthetic only the principle that

the straight line is the shortest between two points. "For my *concept* of straight contains nothing of magnitude but only a quality; the *concept* of shortest is thus entirely added to it, and cannot be analytically derived from *the concept of the straight line*; *intuition* must therefore be enlisted as an aid, and only by means of it is the synthesis possible."[30] – Here too, however, we are not dealing with the concept of straight in general but with the straight line, and this latter is already something spatial, intuited. The determination of the straight line (or, if one prefers, its concept) is none other than that it is an *absolutely* simple line; that is, that in coming
21.200 outside of itself (the so-called movement of the point), it refers simply to itself; that in being extended, no diversity of determination, no reference to some other point or line outside it, is posited; it is *simple*, *absolutely internally determined direction*. This simplicity is indeed its quality, and if the straight line seems difficult to define analytically, this is so precisely because of its simplicity and self-referential character, whereas reflection looks for determination first and foremost in a plurality, in a determining through something else. But there is absolutely nothing inherently difficult in grasping this determination of simple internal extension, this absence of determination by another; Euclid's definition contains nothing else than this simplicity.[31] – But now the transition of this quality to the quantitative determination ("the shortest") that allegedly constitutes the synthetic factor is in fact entirely analytical. As spatial, the line is quantity in general; when said of the quantum, the simplest means *the least*, and when said of line, it means *the shortest*. Geometry can accept these determinations as a corollary to the definition; but Archimedes in his books on the sphere and the cylinder (see Hauber's Translation, p. 4)[32] took the most advisable course by introducing this determination of the straight line as an axiom, in just as correct a sense as Euclid included the determination oncerning parallel lines among the axioms, for the development of this determination into a definition would have also required determinations that do not belong to spatiality immediately but are rather of a more abstract qualitative character, like the simplicity and sameness of direction just mentioned. These ancients gave even to their sciences a plastic character, rigorously confining their exposition to the distinctive properties of their material and thus excluding from it anything heterogeneous to it.

Kant's concept of synthetic *a priori* judgments – the concept of *terms that are distinct* and yet equally *inseparable*; of an *identity* which is within it

[30] B16. [31] See Euclid, *Elements*, Book 1, Definition 4.
[32] Hegel refers to a German translation of 1798. See GW 21.406 for details.

an *inseparable difference* – belongs to what is great and imperishable in his philosophy. To be sure, this concept is also equally present in intuition, for it is the concept as such and everything is the concept implicitly; but the determinations selected in those examples do not exhibit it. Number is an identity, and counting the production of it, which is absolutely external, a merely superficial synthesis, a unity of ones that are rather posited as not inherently identical with each other, but external, each separate for itself; the determination of the straight line of being the shortest between two points is based on a moment of abstract, internally undifferentiated identity.

I return from this digression to addition itself. The corresponding negative species of calculation, *subtraction*, is the equally entirely analytical separation into numbers which, just as in addition, are determined relatively to one another only as *unequal* in general. **21.201**

2. The next determination is the *equality* of the numbers that are to be counted. Because of this equality, the numbers constitute one *unity*, and there thus accrues to number the distinction of unit and *amount*. *Multiplication* is the task of counting up an amount of units that are themselves each an amount. It is therefore immaterial which of two numbers is given as unit and which as amount – whether one says four times three (where four is the amount and three the unit), or, conversely, three times four. – We have already indicated above that the original finding of the product is done by simple counting,[33] that is, by counting off on finger tips, etc.; the subsequent ability to come up with the product *straight away* rests on the collection of such products, on the multiplication table, and on learning it by heart.

Division is the negative species of calculation with this same determination of difference. It is equally immaterial which of two factors, the divisor or the quotient, is taken as unit or as amount. The divisor is determined as unit and the quotient as amount whenever the stated task of the division is to see *how many times* (the amount) *a* number (the unit) is contained in a given number; conversely, the divisor is taken as amount and the quotient as unit whenever the stated intent is to partition a number into a given amount of equal parts and to find the magnitude of the part (of the unit).

3. The two numbers that are determined with respect to each other as unit and amount still are, as numbers, immediate to each other and are therefore *unequal* in general. The further equality is that of unit and amount themselves, and, with this, the progression to the equality of the

[33] Cf. above, 21.198.

determinations inherent in the determination of number is completed. On the basis of this complete equality, counting is the *raising to a power* (the negative counterpart of this calculation is the extraction of a root), and this raising to a power constitutes – in the first instance, as the *squaring* of a number – the complete inherent determinateness of counting where (1) the many numbers to be added are the same, and (2) their plurality or amount is itself the same as the number which is posited a plurality of times, or the unit. There otherwise are no other determinations in the concept of number that could provide a difference; nor is there place for any further equalizing of the difference inherent in number. To raise a number to powers higher than the square is a *formal* continuation of the squaring – both in the case of even exponents, where it is only *a repetition* of the
21.202 squaring, and in the case of the uneven, where inequality resurfaces; in the simplest case of a cube, for instance, despite the formal equality of the new factor with both the amount and the unit, the new factor is as unit unequal as against the amount (the square, 3, against 3 times 3); and even more so in the case of the cube of four, where the times by which the number which is the unit is to be multiplied by itself, 3, differs from this very number. – Here we have in themselves the determinations, amount and unit, which, as the essential difference of the concept, are to be equalized for the complete return to itself of the self-externalized concept.[34] The foregoing exposition also contains the reason why the solution of higher equations must lie in their reduction to quadratics, and also why equations with uneven exponents can only be formally determined and, exactly when the roots are rational, these cannot otherwise be established than by means of some imaginary expression, that is, by the opposite of what the roots are and express. – It is clear from what has been said that the arithmetical square alone contains a determinateness which is inherent to it and absolute; for this reason the equations of higher formal powers must be reduced back to it, just as in geometry the right-angled triangle contains a determinateness absolutely inherent in it which is expounded in the Pythagorean theorem, and for this reason all other geometrical figures must also be reduced to it for their total determination.

[34] In being differentiated as amount and unit, the concept of number goes out of itself (according to the typically Hegelian image). These two determinations of amount and unity had to be shown to be equal to each other and, therefore, each had to constitute the whole of number, before the concept could assume control, so to speak, of its own determinateness and thus return into itself. So far as the concept in general is concerned, in the determinations of amount and unit this movement of externalization and return has been accomplished only in principle in the development of the particular concept of number.

An instruction that proceeds methodically based on a logically disciplined judgment treats powers before it treats proportions; these last do follow upon the difference of unit and amount that constitutes the determination of the second species of calculation, but they proceed from the one of the *immediate* quantum in which unit and amount are only moments; the further determination of the one of quantum still remains external to quantum itself. In ratio, number is no longer an *immediate* quantum; it then has its determinateness as a mediation. This quantitative relation, the ratio, will be considered later on.[35]

The step-by-step determination of the species of calculation that we have just given cannot be said to be a philosophical treatment of them, not an exposition of their inner meaning as it were, for it is not in fact an immanent development of the concept. However, philosophy must know how to distinguish what is by nature a self-external material; it must know that, so far as this material goes, the concept can make its way forward only externally, and its moments also can be only in the form peculiar to their externality, as here equality and inequality. To distinguish the spheres to which a specific form of the concept belongs, that is, in which **21.203** the concept is present in concrete existence, is an essential requirement when philosophizing about real objects. This is to prevent ideas from interfering with the peculiar nature of externality and accidentality, and the ideas themselves, because of the disproportionateness of the material, from being distorted and reduced to a formalism. Here, however, the externality in which the moments of the concepts appear in this external material, number, is the appropriate form; since these moments display the subject matter in the conceptual form of the understanding which is appropriate to it, and also, since they contain no demand for speculative thought and therefore have the semblance of being easy, they deserve to be employed in elementary textbooks.

Remark 2

It is well known that Pythagoras depicted *rational relations* or *philosophemata* in *numbers*,[36] and in more recent times numbers and forms of their relations, such as powers, etc., have again been used in philosophy for the purpose of regulating thoughts or expressing them.[37] – For pedagogical purposes, number is regarded as the most suitable subject matter of inner intuition and the operations of calculating numerical relations are taken

[35] Cf. below, 21.310ff. [36] Cf. Aristotle, *Metaphysics* 965b; 1978b.

[37] Hegel has very likely Schelling in mind. But Bardili also, and Reinhold when a disciple of Bardili, used pseudo-algebraic formulas to express their logical realism.

as the activity of spirit in which the latter visualizes its most characteristic relations and, in general, the fundamental relations of essence. – How far number can live up to this high esteem of its worth can be seen from the concept of it just given.

We saw that number is the absolute determinateness of quantity, and that its element is the difference which has become indifferent: implicit determinateness which is posited at the same time as only entirely external. Arithmetic is an analytical science, since all the combinations and all the differences that occur in its subject matter do not originate in it but are imported into it entirely from outside. Arithmetic does not have any object that might harbor within it such inner relations as would be concealed to knowledge at first, because they are not given in its immediate representation, but are elicited only through the effort of cognition. Not only does arithmetic not contain the concept and the intellectual task of conceptualization that goes with it: it is the very opposite of the concept.
21.204 Here, because of the indifference of the combined to the combining – a combining that lacks necessity – thought finds itself engaged in an activity which is at the same time the utter externalization of itself, a *tour de force* in which it *moves in an element void of thought*, drawing relations where there is no capacity for necessary relations. The subject matter is the abstract thought of *externality* itself.

As this *thought* of externality, number is at the same time the abstraction from the manifold of the senses; it has retained nothing of the senses except the abstract determination of externality itself, and in it the senses are thus brought closest to thought. Number is the *pure thought* of thought's own externalization.

It may therefore occur to spirit, as it rises above the world of the senses and recognizes its own essence, as it seeks an element for the pure *representation* of it, for the *expression of its essence*, before it grasps thought itself as this element and wins the purely spiritual expression for its exposition, it may occur to spirit to choose *number*, this inner, abstract externality, as the element. For this reason we see number early in the history of science being used for the expression of philosophemata. Number constitutes the final stage in an imperfect grasp of the universal still encumbered by the senses. The ancients were clearly aware that number stands midway between the senses and thought. Aristotle cites Plato (*Metaphys*. I.5)[38] as saying that the mathematical determinations of things, being outside both the senses and the ideas, stand in between them. They are distinguished from the senses by

[38] 987b, in fact in Chapter 6.

being invisible (eternal) and unmoved; from the ideas, on the other hand, by being a many and a like, whereas the idea is absolutely self-identical and a one in itself. – A more thorough and more profound reflection on the subject by Moderatus of Gades is cited in *Malchi Vita Pythagoriæ* (ed. Ritterhaus, pp. 30ff.).[39] That the Pythagoreans hit on numbers he attributes **21.205**
to the fact that they were still incapable of grasping fundamental ideas and first principles *clearly in reason*, for these principles are difficult to think and difficult to give expression to; numbers serve well in instruction as signposts. In this among other things the Pythagoreans have imitated the geometers who, unable to express what is corporeal in thoughts, use figures and say "this is a triangle," by which they do not mean, however, that the visible figure is to be taken as the triangle but that it only represents the thought of the triangle. In this way did the Pythagoreans express the thought of unity, of self-sameness and equality, and the ground of congruence, of combination and the sustaining of everything, of the self-identical, as a *one*, and so forth. – It is superfluous to remark that the Pythagoreans did make the step from numerical to thought expression, to the explicit categories of the like and unlike, of limit and infinity; and even with respect to their numerical expressions, it is reported (ibid., in the Remark to p. 31.1.5, from a life of Pythagoras by Photius, p. 722)[40] that they distinguished between the Monas and the one, taking the Monas as the thought and the one as the number, and they likewise took the two as the arithmetical indeterminate and the Dyas (for this is what it would surely have to mean here) as the thought of the indeterminate. – These ancients at the outset saw quite rightly the inadequacy of numerical forms for thought determinations, and they just as rightly went on to demand for thought, instead of that first expedient, the expression appropriate to it. This is how much farther ahead they had come in their reflection than those who nowadays consider it praiseworthy, indeed profoundly sound, to revert to the helplessness of childhood and, in the place of thought determinations, to reinstate numbers themselves and numerical determinations like powers, followed by the infinitely great, the infinitely small, one divided by the infinite, and other such determinations, which are themselves often a perverse mathematical formalism.

In connection with the just cited claim, that number stands between the *senses* and thought,[41] since it has in common with the former that it is in itself the self-externality of the *many*, it must now be noted that this many

[39] Moderatus of Gades (modern Cadiz) was a neo-Pythagorean active in the first century AD. For the life of Pythagoras by Malchus, see GW 21.425.

[40] See GW 21.425. [41] Cf. above, 21.204.

is itself the sensuous as taken up in thought, the category of the internally self-external that defines the sensuous. When more advanced *thoughts*, thoughts that are concrete and truly thoughts, when what is alive and active in a high degree and requires context in order to be *comprehended*,
21.206 when these are transposed into this element of externality, they turn into dead, motionless determinations. The richer in determinateness and hence in connections thoughts become, the more confused and also the more arbitrary and meaningless becomes their representation in such forms as numbers. The one, the two, the three, the four, Henas or Monas, Dyas, Trias, Tetractys, still fall in the general vicinity of totally *simple and abstract* concepts; but when numbers are extended to concrete relations, it is in vain to try to maintain any approximation to the concept.

But that the determinations for the movement of the concept by which alone the latter is concept would be designated as one, two, three, four, is the hardest to expect of thought. For thought then moves in an element which is opposite to it, where there are no connections; its labor is one of derangement. The difficulty of this expectation, to understand that, for instance, one is three and three is one, is due to the fact that one is devoid of connections; it does not exhibit in it the determination by virtue of which it passes over into its opposite, but is rather the very exclusion and rejection of such a connection. Conversely, the understanding makes use of this difficulty to debunk speculative truth (as it does, for instance, with the truth laid down in the doctrine called the Trinity). It *counts* the determinations of it that constitute one unity in order to expose them as plain nonsense – which is to say, the understanding itself commits the nonsense of making that which is pure reference[42] into something devoid of all relation. By the name "Trinity," "tri-unity," nobody expected that one and number would be considered by the understanding as the *essential determinateness* of the content. This name expresses contempt for the understanding, which has nevertheless held fast to its conceit of clinging to the one and number as such, standing by it against reason.

To take numbers and geometrical figures, as has often been done, as mere *symbols* (the circle, for instance, of eternity; the triangle, of the Trinity) is, on the one hand, harmless enough; but, on the other hand, it is foolish to believe that more is thereby expressed than can be *comprehended* and *expressed by thought*. As profound a wisdom, as *profound a meaning may lie* in such symbols, and also in those that *phantasy* has created in the mythologies of the peoples and in poetry in general (compared with which

[42] *Beziehung.*

the dull figures of geometry leave a lot to be desired anyway), it is still up to **21.207**
thinking alone to extract this wisdom and bring it to light, a wisdom that is only *implicit in* them, and not only *in* symbols but *in* nature and *in* spirit. In symbols, the truth is still *clouded* and *veiled* by the sensuous, and only in the form of thought does it become totally manifest to consciousness; the *meaning* is only the thought itself.

Essentially, however, the perversity of enlisting mathematical categories for injecting some determination into the method and the content of philosophical science shows in the fact that, inasmuch as mathematical formulas signify thoughts and conceptual distinctions, this meaning must rather first be indicated, determined and justified in philosophy. In its concrete sciences, philosophy must take its logical element from logic, not from mathematics; it can only be an expedient of philosophical incapacity to resort for the logical element of philosophy to the shapes which it assumes in other sciences, many of which are only adumbrations of this element and others even perversions of it. Besides, the mere application of such borrowed formulas is an external operation; the application itself must be preceded by the awareness of both their value and their meaning, and only the consideration of thought, not any authority drawn from mathematics, yields this awareness. Logic itself is this awareness regarding such formulas. It strips them of their particular form, rendering it superfluous and useless; it rectifies them and alone procures for them their justification, their sense and value.

As for any supposed use that number and calculation might have for basic *pedagogical* formation, it follows by itself from what has been said so far. Number is not an object of the senses, and to be occupied with number and numerical combinations is not the business of the senses; such an occupation, therefore, encourages spirit to engage in reflection and the inner work of abstraction, and this is of great, though one-sided, importance. For, on the other hand, since the basis of number is only an external, thoughtless difference, the occupation proceeds without a concept, mechanically. The effort consists above all in holding on to something non-conceptual, and in combining it non-conceptually. The content is the empty "one." So the solid nourishment of moral and spiritual life in its individual shapes on which, as the noblest aliment, education should nurture the young **21.208**
spirit, is to be ousted by this "one" which is void of content; when those exercises are made the main subject and the main occupation, the only possible outcome must be to dull the spirit and to empty it of both form and content. Since calculation is so much of an external and therefore mechanical business, it has been possible to manufacture *machines* that

perform arithmetical operations with complete accuracy. It is enough to know this fact alone about the nature of calculation to decide on the merit of the idea of making it the main instrument of the education of spirit, of stretching spirit on the rack in order to perfect it as a machine.

B. EXTENSIVE AND INTENSIVE QUANTUM

a. Their difference

1. We have seen that quantum has its determinateness as limit in *amount*. In itself quantum is discrete, a plurality which does not have a being different from its limit or its limit outside it. Quantum, thus with its limit which as limit is a plurality, is *extensive magnitude*.

Extensive magnitude is to be distinguished from *continuous* magnitude; its direct opposite is not the discrete, but the *intensive* magnitude. Extensive and intensive magnitudes are determinacies of the quantitative *limit* itself, whereas quantum is identical with its limit; continuous and discrete magnitudes are, on the contrary, determinations of *magnitude in itself*, that is, of quantity as such, in so far as in quantum abstraction is made from
21.209 the limit. – Extensive magnitude has the moment of continuity in it and in its limit, for its many is everywhere continuous; the limit as negation appears, therefore, in *this equality* of the many as a limiting of the unity. Continuous magnitude is quantity that continues without regard to any limit, and in so far as it is represented with one such limit, the latter is a limitation in general, *without discreteness being posited in it*. Determined as only continuous magnitude, quantum is not yet determined for itself because the magnitude lacks the one (in which the determinateness-for-itself lies) and number. Similarly, a discrete magnitude is immediately only a differentiated many in general which, if it were to have a limit as a many, would be only an aggregate, that is, would be only indeterminately limited; in order for quantum to be determinate, the many must be concentrated into one and thereby be posited as identical with the limit. Continuous and discrete magnitude, taken as *quantum* in general, have each posited in it only one of the two sides by virtue of which quantum is fully determined and a *number*. Taken immediately, this latter is *extensive* quantum – the simple determinateness which is *amount* essentially, but the amount of one and the same unit; extensive quantum is distinguished from number only because in the latter the determinateness is explicitly posited as plurality.

2. However, the determinateness through number – how much there is of something – does not require being distinguished from how much there

is of something else, as if to the determinateness of one thing belonged how much there is of it and how much there is of an other, for the determinateness of magnitude as such is a limit determined for itself, indifferent and simply self-referring; and in number this limit is posited as enclosed within the one existing for itself: the externality that it has, the reference to other, is *inside it*. Further, like the many in general, this many of the limit is not internally unequal but continuous; each many is what any other many is; consequently, the many as a many of existents outside one another, or as discrete, does not constitute the determinateness **21.210**
as such. Thus this many collapses for itself into its continuity and becomes simple unity. – Amount is but a moment of number; but, *as an aggregate of numerical ones*, it does not constitute the determinateness of number; on the contrary, these ones as indifferent and self-external are sublated in number whose being has turned back into itself; the externality that constituted the ones of plurality vanishes in the one as the self-reference *of* number.

The limit of quantum which, as extensive, had its existent determinateness as self-external number, thus passes over into *simple determinateness*. In this simple determination of limit, quantum is *intensive magnitude*; and the limit or the determinateness which is identical with quantum is now also posited as simple: it is *degree*.

Degree is thus a determinate magnitude, a quantum, but at the same time it is not an aggregate or several *within itself*; it is only a *plurality*;[43] plurality is a severality that has gathered together into simple determination, it is existence that has returned into being-for-itself. It is true that its determinateness must be expressed by a *number*, which is the being of the quantum as completely determined, but the number is not an *amount or a how many times* but is rather a onefold, only a degree. When we speak of 10 or 20 degrees, the quantum which has that many degrees – the tenth, the twentieth degree – is not the amount and sum of the degrees; if that were the case, it would be an extensive quantum; it is rather only that one degree, the tenth, the twentieth. It does contain the determinateness found in the number ten or twenty, but not as several ones: the number is there as a *sublated* amount, as a *simple* determinateness.

3. In number, quantum is posited in its complete determinateness; but as intensive quantum, in the being-for-itself of number, it is posited as it is according to its concept or implicitly in itself. For the form of self- **21.211**
reference which it has in degree is at the same time the *externality* of degree

[43] *Mehrheit*; literally, "majority."

to itself. As extensive quantum, number is a numerical plurality and thus has externality inside it. This externality, as plurality in general, collapses into a state of undifferentiatedness and is sublated into the numerical one, the self-reference of number. But quantum has its determinateness as number; it contains this determinateness, as we have said, whether the latter is posited in it or not.[44] Degree, therefore, which as internally simple no longer *has* this *external otherness in it*, has it *outside it*, and refers to it as to its determinateness. A plurality external to it constitutes the determinateness of the simple limit which the degree is for itself. In so far as in the extensive quantum amount was supposed to be found within number, it was sublated there; now, as thus sublated, amount is posited outside number. Number, in being posited as a one, as self-reference reflected into itself, excludes from itself the indifference and the externality of amount and is *self-reference as reference to an external through itself*.

In this, quantum has the reality which is adequate to its concept. The *indifference* of the determinateness constitutes its quality, that is, a determinateness which is in it as a determinateness external to itself. – Accordingly, degree is a unitary quantitative determinateness *among* a *plurality* of such intensities which, though diverse, each being only a simple reference to itself, are at the same time in essential connection with each other, so that each has its determinateness in this continuity with the others. This reference connecting a degree through itself to its other makes ascent and descent on the scale of degrees a continuous progress, a flow, which is
21.212 an uninterrupted and indivisible alteration; none of the "more or less"[45] differentiated within it is separate from the others but each has its determinateness only in these others. As a self-referring quantitative determination, each degree is indifferent towards the others; but, in itself, it equally refers to this externality; it is what it is only through the intermediary of this externality; in short, its reference to itself is not an indifferent reference to externality but in this externality it possesses its quality.

b. Identity of extensive and intensive magnitude

Degree is not inherently external to itself. It is not, however, the *indeterminate* one, is not the principle of number as such which is not amount

[44] In the preceding Remark.

[45] *Mehrern*. Here and in what follows Hegel is playing on the root meaning of the German word for "several" (*mehrere*) which is "more" (*mehr*). This wordplay is lost in English. I am using circumlocutions in an attempt to retain it as much as possible.

except negatively, that is, only in the sense of not being an amount. Intensive magnitude is at first a simple *one of many* "*more or less*"; there are several degrees; but they are not *determined* either as a unitary one or as a more or less but only *as referring to each other as outside each other*, or in the identity of the one and the "more or less than." Thus, although the several "more or less" are as such indeed outside the unitary degree, the determinateness of the latter lies nonetheless in its connection with them; the degree thus contains amount. Just as twenty contains as extensive magnitude twenty ones as discrete, the specific degree contains them as continuity, a continuity which simply is this determinate plurality; it is *the twentieth* degree, and it is this twentieth degree only through the intermediate of this amount which, as such, is outside it.

The determinateness of the intensive magnitude is to be considered, therefore, from two sides. It is determined through *other* intensive quanta and is continuous with its otherness, so that its determinateness consists in this connection with it. Now, in so far as this determinateness is, *first*, a *simple* determinateness, it is determined *as against* the other degrees; it excludes them from itself and has its determinateness in this exclusion. **21.213**
But, *second*, it is determined within; this it is in the amount as *its* amount, not in the amount as excluded, or not in the amount of the other degrees. The twentieth degree contains the twenty within itself; it is not only determined as distinguished from the nineteenth, the twenty-first, etc., but its determinateness is rather *its* amount. But, inasmuch as the amount is its own, and the determinateness is at the same time essentially as amount, the degree is extensive quantum.

Extensive and intensive magnitude are, therefore, one and the same determinateness of quantum; they are distinguished only inasmuch as the one has the amount within and the other has the same without. Extensive magnitude passes over into intensive magnitude because its many collapses in and for itself into oneness and steps outside it. But, conversely, this simple one has its determinateness only in the amount, *its* amount; indifferent to the otherwise determined intensities, it has the externality of amount in it; thus intensive magnitude is just as essentially extensive magnitude.

With this identity, the *qualitative something* comes on the scene; for the identity is the unity that refers back to itself through the *negation of its distinct terms*; these terms, however, make up the determinateness of the existent magnitude. The *something* is a quantum, but its qualitative existence is now posited as indifferent to it as it is in itself. One can speak of quantum, number as such, etc., without any mention of a something as their substrate. But the something, self-*mediated* by virtue of the negation

of its determinations, now confronts these as *existing for itself*, and, since it has a quantum, it confronts them as something which has an extensive and intensive quantum. Its *one* determinateness which it has as quantum is posited in the distinct moments of *unity* and *amount*; it is *in itself* not only one and the same determinateness, but the positing of it in these differences as extensive and intensive quantum is the return into this unity
21.214 which, as negative, is the something posited as indifferent to them.

Remark 1

As normally depicted in ordinary usage, *extensive* and *intensive quantum* are distinguished as *kinds of magnitudes*, as if there were some objects with only intensive and others with only extensive magnitude. But there is now a philosophical science of nature in which plurality, the extensive (as for instance in connection with the fundamental property of nature to fill space, and in other instances as well), is converted into something intensive, in the sense that intensity, as *dynamism*, is the true determination. Density, for instance, or the specific filling of space, must be understood as being essentially, not a certain *aggregate and amount* of material parts in a quantum of space, but a certain *degree* of the *force* of the matter filling space.[46]

There are two kinds of determinations to be distinguished in this context. Two concepts are at play in this conversion, as it has been called, of the mechanical into the dynamic way of looking at things:[47] the concept of *self-subsisting parts that subsist outside one another* and are only externally bound together into a whole, and, different from this, the concept of *force*. What is viewed on the one side as only an aggregate of mutually external atoms is considered on the other side as the expression of a fundamental simple force. – Now these relations of whole and parts, of force and its expression, that come up for contrast here, do not belong in this place; they will be considered later on.[48] This much, however, can be pointed out right away, namely that although the relation of *force* and its expression that corresponds to the intensiveness of magnitude is indeed, *vis-à-vis* the relation of whole and parts, the truer one, force is for that reason

[46] Cf. F. W. J. Schelling, *Ideen zu einer Philosophie der Natur* (Leipzig, 1797, 2nd edn). English trans. *Ideas for a Philosophy of Nature*, trans. E. H. Harris and Peter Heath (Cambridge: Cambridge University Press, 1988), Book II, Chapter 5, p. 185: "Matter occupies a space, not through its mere *existence* (for to assume this is to cut off all further enquiry, once and for all), but through an inherent *moving force*, whereby the *mechanical* motion of matter first becomes possible." Schelling is developing an idea of Kant. Cf. Kant (1786) AK 4.496.

[47] For Schelling's critique of M. le Sage's mechanical physics, see *Ideen* (1797), English trans., pp. 161ff.

[48] Cf. 11.354–359.

no less one-sided than intensiveness, and the *expression* (the externality of extensiveness) just as *inseparable* from force, so that *one and the same content* is equally present in the two forms of intensive and extensive magnitude.

The other determinateness that comes up here is the *quantitative* as such, which, as extensive quantum, is sublated and transformed into degree, the supposedly true determination; but it has been shown that degree contains the former determinateness as well, so that the one form is essential to the other; consequently, every existence exhibits its quantitative determination no less as an extensive than as an intensive quantum. **21.215**

Everything, to the extent that it appears in a quantitative determination, therefore serves as an example of this. Even *number* necessarily has this double form immediately in it. It is an amount, and therefore extensive magnitude; but number is also a one, a ten, a hundred; and to this extent it marks the transition to intensive magnitude, for in this unity the manifold collapses into the simple. *In itself*, the one is extensive magnitude; it can be represented as an arbitrary amount of parts. Thus the *tenth*, the *hundredth*, is this simple, intensive magnitude that has its determinateness in the more or less than a hundredth lying outside it, that is, in the extensive magnitude. Number is a ten, a hundred, and at the same time the tenth, the hundredth, in the system of numbers; both are the same determinateness.

In the circle the unit is called *degree* because every part of the *circle* has its determinateness essentially in the many more outside it; it is determined as the unit of only a fixed amount of these units. As a mere spatial magnitude, the degree of the circle is only an ordinary number; considered as degree, it is an intensive magnitude that has meaning only as determined through the amount of degrees into which the circle is divided, just as a number derives its meaning only in the number series.

The magnitude of a concrete object displays its two sides as extensive and intensive in the double determinations of its existence, appearing in one as *something external* and in the other as *something internal*. Thus, for instance, a mass is as weight an *extensive magnitude* inasmuch as it constitutes an amount of pounds, hundredweights, etc., but is an *intensive magnitude* as it exerts a certain pressure; the magnitude of the pressure is a simple magnitude, a degree, as determined in a scale of degrees of pressure. As exerting pressure, the mass appears as a being-in-itself, a subject, to which there accrues a distinctive intensive magnitude. – Conversely, that which exerts this *degree* of pressure has the capacity of displacing a certain *amount* of pounds, etc., and its magnitude is measured accordingly.

Or again, heat has a *degree*; this degree, whether the 10th, the 20th, etc., is a simple sensation, something subjective. But this degree is equally

present as *extensive* magnitude, in the form of the expansion of some fluid matter, of mercury in the thermometer, of air, sound, etc. A higher degree of
21.216 temperature finds expression in a longer mercury column, or in a narrower clay cylinder; it warms up a larger space in the same way as a lower degree warms up a smaller.

The higher a tone, the *more intensive* it is, and the *greater* is at the same time *the number* of its vibrations; or a louder tone, to which a higher degree of intensity is attributed, is audible in a larger space. – With a more intensive color a larger surface can be colored in the same way as with a weaker one; or again, *something brighter* (another kind of intensity) is visible at a greater distance than something not as bright, etc.

Similarly in things *spiritual*, *a high intensity of character*, *talent*, *genius*, has a comparably *encompassing* presence, *far-reaching* effect, and *all-pervading* influence. The most profound concept has the *most universal* significance and application.

Remark 2

Kant has made peculiar use of the determinateness of intensive quantum by applying it to a metaphysical determination of the *soul*. In his critique of the metaphysical propositions concerning the soul which he calls the paralogisms of reason, he comes to a consideration of the syllogistic inference from the simplicity of the soul to its permanence. To this inference he objects (*Critique of Reason*, 414) "that, even if we grant to the soul this simple nature, namely, that it contains no manifold of [parts] outside one another, and hence no *extensive* magnitude, one nevertheless cannot deny to it, anymore than to *any other existing thing*, *intensive* magnitude, that is, a *degree* of reality in regard to all its faculties, indeed to everything in general that constitutes its existence, which might *diminish by infinitely many smaller* degrees, and thus the alleged substance could be transformed into nothing, although not by disintegration, but by a gradual remission (*remissio*) of its powers; for even *consciousness* always has a *degree*, which can always be diminished; consequently, so does the faculty of being conscious of itself, and likewise with all other faculties."[49] In rational psychology, such as was this abstract metaphysics, the soul was considered not as spirit but as *an immediate existent*, as a *soul-thing*. Kant is therefore justified in applying to it the category of quantum, just as "to any other existing thing," and, inasmuch as this existent is determined as simple, that of

[49] B414. Guyer/Wood translation, with some modifications. Hegel adds the stresses and also drops some parenthetical clauses.

intensive quantum. *Being* does indeed belong to spirit, but of an intensity entirely different from that of intensive quantum; it is an intensity, rather, in which the form of merely immediate being and all its categories are sublated. It should not have been just a matter of agreeing to the removal **21.217** of the category of extensive quantum, but of removing quantum as such. The next step was to recognize how in the eternal nature of spirit there is existence, consciousness, and finitude, how they proceed from it, without spirit thereby becoming a thing.

c. Alteration of quantum

The difference between extensive and intensive quantum is indifferent to the determinateness of quantum as quantum. But quantum is in general determinateness posited as sublated: the indifferent limit, the determinateness which is just as much the negation of itself. In extensive quantum, this difference is developed; but intensive magnitude is the *existence* of this externality which quantum is in itself. The difference is posited as the contradiction which it is in itself, of being a simple *self-referring* determinateness which is the negation of itself, of having its determinateness not in it but in another quantum.

A quantum, according to its quality, is therefore in absolute continuity with its externality, with its otherness. Consequently, not only *can* every determinateness of magnitude be transcended, not only *can* it be altered: that it *must* alter is now *posited*. The determination of magnitude continues into its otherness in such a way that it has its being only in this continuity with an other; it is not just a limit that *exists* but one that *becomes*.

The one is infinite or self-referring negation, and hence the repulsion of itself from itself. Quantum is equally infinite, posited *as* the self-referring negation; it repels itself from itself. But it is a *determinate* "one," the one which has passed over into existence and limit, thus the repulsion **21.218** of determinateness from itself, not the generation of something that is like itself (as the repulsion of the one) but of its otherness; quantum is now posited in it as *sending itself*[50] *beyond itself*. It consists in this, that it increases or decreases; it is within it the externality of determinateness.

Thus quantum sends itself beyond itself; this other which it becomes is at first itself a quantum, but a quantum which is not a static limit but one that impels itself beyond itself. The limit which arises in this beyond

[50] *sich schicken*.

is therefore only one that again sublates itself and sends itself to a further limit, *and so on to infinity*.

c. quantitative infinity

a. Its concept

Quantum alters and becomes another quantum; the further determination of this alteration, that it goes on *to infinity*, lies in that it is positioned as inherently self-contradictory. – Quantum becomes an *other*; but it *continues* in its otherness; the other is therefore also a quantum. This latter, however, is the other, not of *a* quantum, but *of the* quantum as such, the negative of itself as a limited something, and hence its own unlimitedness, *infinity*. Quantum is an *ought*; it implies that it *be determined-for-itself*, *and this*
21.219 being-determined-for-itself is rather the *being determined in an other*; and, conversely, it is the being-determined in an other as sublated, is *indifferent* subsisting-for-itself.

In this way, finitude and infinity each at once acquires within it a double though opposite meaning. Quantum is *finite*, first, as limited in general; second, as sending itself beyond itself, as being-determined in an other. On the other hand, its *infinity*, is, first, the unlimitedness of quantum; second, its being-turned-back-into-itself, the indifferent being-for-itself. If we now compare these moments with each other, we find that the determination of quantum's finitude, its sending itself beyond itself into an other that constitutes its determination, is equally the determination of the infinite; the negation of limit is this same transcendence of determinateness, so that in this negation, in the infinite, quantum has its final determinateness. The other moment of infinity is the for-itself which is indifferent to the limit; but the quantum itself is so limited, as to be indifferent with respect to its limit, and hence with respect to other quanta and its "beyond." In quantum, finitude and infinity (the latter supposedly separate from finitude, as bad infinity) each already possesses within it the moment of the other.

The qualitative and quantitative infinite are distinguished inasmuch as in the former the opposition of the finite and infinite is qualitative, and the transition of the finite into the infinite, or the reference of each to the other, is present only *in the in-itself*, in their concept. Qualitative determinateness is immediate; it refers to otherness essentially as to a being which is other than it; it is not *posited* as having its negation, its other, *in it*. By contrast, magnitude is as such *sublated* determinateness; it is *posited* as being unlike

and indifferent to itself, and hence as something alterable. The qualitative finite and infinite, therefore, stand opposed to each other absolutely, that is, abstractly; their unity is the *inner* connection underlying them; hence the finite continues in its other only *in itself*, not *in it*. By contrast, in the infinite in which the quantitative finite has its absolute determinateness, this finite *refers to itself in* it. This, their mutual reference, is first displayed in the *quantitatively infinite process*. **21.220**

b. The quantitative infinite process

The process to infinity is in general the expression of contradiction, here, of the contradiction contained in the quantitative finite or in quantum in general. It is the reciprocal determination of the finite and the infinite that came up for consideration in the sphere of the qualitative,[51] with the difference that, as just indicated, in the sphere of quantity the limit inherently sends itself beyond itself and continues there, and hence, conversely, the quantitative infinite is also posited as having the quantum in it, for in its externality quantum is itself; its externality belongs to its determination.

The *infinite progress* is now the *expression* of this contradiction, *not the resolution of it*; however, because of the continuity of one determinateness in the other, the progress gives rise to the semblance of a resolution in a union of the two. As at first posited, such a progress is the *task* of attaining the infinite but not the attainment of it; it is a perpetual *generation* of the infinite, without the progress of ever getting beyond the quantum itself, and without the infinite ever becoming something which is positively present. It belongs to the concept of quantum to have a *beyond* of itself. This beyond is, first, the abstract moment of the *non-being* of quantum; this resolves itself in it; it thus refers to its *beyond* as to its infinity in accordance with the *qualitative* moment of the opposition. But, second, quantum is continuous with this beyond; it consists precisely in being the other of **21.221** itself, external to itself; this externality equally is, therefore, no more an other than the quantum; the *beyond* or the infinite is thus itself *a quantum*. The beyond is thus recalled from its flight and the infinite is attained. But because the infinite, now become a "this-side," is again a quantum, what is posited is again only a new limit; this limit, as quantum, has also fled again from itself, is as such beyond itself, and has repelled itself from itself into its non-being, into its beyond, and as the quantum repels itself into the beyond, so does the beyond perpetually become a quantum.

[51] Cf. 21.218–219.

The continuity of quantum with its other brings about the conjunction of the two in the expression of an *infinitely great* or *infinitely small*. Since they both still have in them the determination of quantum, they remain alterable and the absolute determinateness which would be a being-for-itself is thus not attained. This *being-outside-itself* of the determination is posited in the double infinity (posited in the relative opposition of the "more" and the "less") of the infinitely great and the infinitely small. In each, the quantum is *maintained* in perpetual opposition to its beyond. No matter how much the "great" is enlarged, it shrinks to insignificance; since it refers to the infinite as to its non-being, the opposition is *qualitative*; the enlarged quantum has gained nothing, therefore, from the infinite; the latter is its nothing now just as before. Or again, the increase in the quantum is not an *approximation* to the infinite, for the distinction between the quantum and its infinity essentially has also the *moment* of being non-quantitative. This moment is only the sharpened expression of the contradiction that the quantum ought to be *something great*, that is, a quantum, and *non-finite*, that is, not a quantum. – Equally, the infinitely small is, as something small, a quantum and therefore remains absolutely, that is, qualitatively, too great for the infinite and opposed to it. In both, there remains the contradiction of the infinite progress which in them should have reached its goal.

21.222 This infinity, which persists in the determination of the beyond of the finite, is to be characterized as the *bad quantitative infinity*. Like the qualitatively bad infinity, it is the perpetual movement back and forth from one side of the persistent contradiction to the other, from the limit to its non-being, and from the latter back again to the other, the limit. To be sure, the term to which the advance is made in the quantitative progress is not an abstract "other" in general but a quantum which is explicitly posited as different; but this quantum remains opposed to its negation in the same way. Also the progress, therefore, is neither an advance nor a gain but rather a repetition of one and the same move, a positing, a sublating, and then again a positing and a sublating: an impotence of the negative to which what it sublates continuously comes back by its very sublation of it. The two, the positing and the sublation, are so bonded to each other that they absolutely flee from each other and yet, in thus fleeing, they are unable to part but rather become bonded in their very flight from each other.

Remark 1

The bad infinity, especially in the form of the *quantitative progress to infinity* – this uninterrupted flitting over limits which it is powerless to

sublate, and the perpetual falling back into them – is commonly held to be something sublime and a kind of divine service, just as in philosophy it has been regarded as ultimate. This progress has often been exploited in tirades which have been admired as sublime productions. In fact, however, this *modern* sublimity does not enhance the *object*, which rather takes flight from it, but bloats the subject who ingests such vast quantities. The poverty of such an irreducibly subjective step by step elevation on the ladder of the quantitative is betrayed by the admission that in that vain labor there is no getting closer to the infinite goal – for the attainment of which, to be sure, quite another line of attack is required.

Here are examples of tirades of the kind, which make manifest what this elevation ultimately amounts to. Kant, for example, at the conclusion of the *Critique of Practical Reason*, deems it as sublime "when the subject rises in **21.223** thought above the place it occupies in the world of the senses, and extends its reach into an unbounded magnitude of worlds beyond worlds and systems of systems and into the limitless times of their periodic motion, their beginning and their continuance.[52] – Imagination fails before this progression into the immeasurably distant, where beyond the *most distant world* there lies a still *more distant one*; behind the past, however *far back* traced, a still *more* distant past; ahead of the future, however *far down* projected, yet another future. *Thought* fails before this representation of the immeasurable, just as in a dream, in which one relentlessly goes on and on down a long corridor without seeing the end of it, and finishes with *falling* or *fainting*."[53]

This account, besides capturing all that there is to this quantitative elevation in a wealth of pictorial imagery, deserves praise mainly because of how truthfully it betrays the end result of this elevation: thought succumbs, the upshot is falling and giddiness. What causes thought to succumb, what produces the falling and the giddiness, is nothing else but the *boredom* of this repetition that makes a limit disappear, come up again, and again disappear, and so lets the rising and the perishing of the one *for* the other, and of the one *into* the other, of the here into the there, and the there into the here, perpetuate itself, only conveying the feeling of the *impotence* of this infinite, this ought, which would want to be master of the finite but cannot.

[52] AK 5.162, a paraphrase more than a citation.

[53] The critical editors say that this second part of the quote cannot be located with any precision in Kant.

Also Haller's *description of eternity*, which Kant called *horrifying*,[54] is commonly the object of special admiration, but often for what is precisely not the reason that constitutes its true merit:

> I heap up giant numbers,
> Pile millions on millions;
> Eon upon eon and world upon world,
> And when I am on that endless march
> And dizzy on that terrifying height
> I seek you again.
> [The power of numbers, though multiplied a thousandfold,
> Is still not even a fraction of you.]
> **21.224** *I blot them out and there you are, complete, before me*.[55]

In stressing the value of this heaping and piling of numbers and worlds as a *description of eternity*, what is overlooked is that the poet himself declares this so-called terrifying venture into the beyond as futile and hollow, and he concludes that only by *giving up* this empty infinite progress will the true infinite itself *become present to him*.

There have been astronomers who liked to flatter themselves about the sublimity of their science on the ground that it deals with an *immeasurable* multitude of stars, with *immeasurable* spaces and times within which the already vast distances and periods that serve as their units, even when taken many times over, shrink to insignificance. The shallow astonishment to which they surrender themselves, their fatuous hopes of eventually traveling in another life from star to star and in that immensity to make discoveries *of always the same kind of things*, this they adduce as the main point of excellence of their science – a science which is worthy of admiration rather, not because of such quantitative infinitude but, to the contrary, because of the *relations of measure* and the *laws* which reason recognizes in these objects and which, in contrast to that other irrational infinitude, constitute the rational infinite.

To the infinity connected with the external intuition of the senses, Kant opposes the other infinity, the one which the individual attains when "he returns to his invisible 'I,' and to all the terrors of fate and tyranny he opposes the absolute freedom of his will, of a pure 'I'; when, starting with his immediate surroundings, he lets them vanish in his sight, and even

[54] A613/B641. Cf. also Kant (1794), AK 8.327.

[55] Albrecht, Baron von Haller (1708–1777), Swiss physiologist and poet, *Imperfect Poem on Eternity* (1736). See *Hallers Gedichte*, ed. Ludwig Hirzel (Bibliothek alterer Schriftwerke der deutschen Schweiz, 1882), Vol. 3, p. 151. The English translation is by Arnulf Zweig. The stress in the last line is added by Hegel.

what appears enduring, the worlds upon worlds, he lets collapse into ruins until, alone, he recognizes *himself as equal to himself*."[56]

The "I," in this solitude, is indeed the attained beyond; it has come to itself, is *at home with itself, right here*; the absolute negativity which in the progression beyond the quantum of the senses was only in flight, is brought in pure self-consciousness to affirmation and presence. But this pure "I," when held fixed in abstraction and empty of content, has existence in general, the fullness of the natural and the spiritual universe, as a beyond confronting it. The same contradiction reasserts itself that lies at the heart **21.225**
of the infinite progress, namely of a being bent upon itself which is at the same time outside itself, which refers to its other as to its non-being and in this referring remains a *longing*: for the "I" has fixed itself, on the one side, with its indigent and insufferable emptiness before it, and, on the other side, with a fullness which in being negated is still present as its beyond.

Kant accompanies the mention of these two sublimes with the remark "that wonder (for the first, the external) and reverence (for the second, the inner) do indeed *excite research* but cannot substitute for their deficiency."[57] – Thus he declares those exaltations as being unsatisfying for reason, for reason cannot stop at them and at the feelings associated with them, nor can it let the beyond and the void be accepted as ultimate.

But it is above all in its application to *morality* that the infinite progression has been taken as an ultimate. The second opposition, just cited, of finite and infinite in the shape of the manifold world and the "I" raised to its freedom, is at first qualitative. As it determines itself, the "I" at the same time determines nature and frees itself from it; it thereby refers itself to its other through itself – refers to an other which, as external existence, is a manifold and also something quantitative. The reference to the quantitative becomes itself quantitative; the negative reference of the "I" to it, its power over the "not-I," over the senses and external nature, is consequently so represented that morality can and ought ever to *enlarge* while the power of the senses ought ever to *recede*. The perfect adequacy of the will to the moral law, however, is transposed to the unending progress to infinity, that is, is represented as an *absolutely unattainable* beyond, and precisely this – that it is unattainable – is supposed to be the source of true reliance and just consolation. For morality ought to be a struggle, but this it cannot be except on the assumption that the will is disproportionate to the law and the law, therefore, becomes for it an irreducible beyond.[58]

[56] The citation is very likely a conflation of several texts. But cf. *Critique of Practical Reason*, AK 5.161.
[57] Cf. AK 5.162. [58] Hegel has both Kant and Fichte in mind.

In this opposition, the "I" and the "not-I," or the will and the moral law and nature and the sensuousness of the will, are presupposed as perfectly
21.226 self-subsistent and mutually indifferent. The pure will has its own law, which is essentially connected with the senses; nature and the senses, for their part, have their laws which neither stem from nor are conformable to the will, nor are such that, although diverse from the will, would nonetheless be in essential connection with it, but are rather independently determined, finished and complete in themselves. The two are nevertheless both moments of *one and the same simple essence*, of the "I"; the will is determined as the negative with respect to nature so that the will only is to the extent that there is such a thing as a nature which is diverse from it and which it sublates, but by which, in sublating it, it is touched and is itself affected. Nature, also as the sensuous element of the human being, is a self-subsistent system of laws indifferent to limitation through an other; it preserves itself while being limited, comes in connection with the will on its own terms and limits the will of the law just as much as this will limits it. – It is by one single act that the will, in determining itself, sublates the otherness of a nature, and this otherness, in being posited with a determinate existence, resists sublatedness and is not sublated. In the infinite progression the contradiction at work here is not resolved but, to the contrary, it is displayed as unresolved and unresolvable and is declared to be such; the conflict of morality and sense is represented as an absolute relation that exists in and for itself.

The powerlessness in mastering the qualitative opposition between the finite and infinite and in grasping the idea of the true will which is substantial freedom, this powerlessness takes refuge in *magnitude* which it used as a middle link, for magnitude is the qualitative as sublated, the distinction that has become indifferent. But since the two members of the opposition still remain in principle qualitatively different, by behaving as quanta in referring to each other they are rather each straight away posited as indifferent to this alteration. Nature is determined through the "I," the senses through
21.227 the will of the good; the alteration produced in the senses through the will is only a quantitative distinction, one which leaves them be as they are.

In the more abstract exposition of the Kantian philosophy, or at least of its principles, namely in Fichte's *Wissenschaftslehre*, the infinite progress likewise constitutes the foundation and the ultimate.[59] The first principle in the exposition, "I = I," is followed by a second which is independent

[59] For the following, cf. Fichte, *The Science of Knowledge* (1794), §1, pp. 95ff., 104ff., 108ff.; GA I.2.258ff, 266ff., 270–272.

of it, the *opposition* of the "not-I"; the *connection* between the two is right away also assumed as a *quantitative* distinction, the "not-I" being *partly* determined through the "I," also *partly* not. The "not-I" thus continues in it so that it remains opposed to its non-being as something non-sublated. Starting from there, after the contradictions contained therein have been developed in the system, the concluding result is the same relation that made the beginning; the "not-I" remains an infinite shock,[60] an absolute other;[61] its final reciprocal reference connecting it with the "I" is the infinite progress, *longing* and *striving* – the same contradiction with which the beginning was made.[62]

Because the quantitative is determinateness posited as sublated, it was assumed that, by reducing opposition in general to a difference that is only quantitative, much, or rather everything, had been gained for the unity of the absolute, for this one substantiality.[63] That *all opposition is only quantitative* was for some time a fundamental principle of recent philosophy; the opposed determinations have the same essence, the same content; they are real sides of the opposition because each contains within it both determinations, both factors of the opposition, though it is one factor that *predominates* on the one side, and the other factor on the other side; on the one side, one factor, some matter or activity, is present in *greater aggregate* or in a *stronger degree* than in the other. To the extent that different materials or activities are presupposed, the quantitative difference **21.228** rather confirms and completes their externality and indifference to each other and to their unity. The difference of the *absolute* unity is supposed to be only quantitative and, to be sure, the quantitative is the sublated immediate determinateness, but one which is only incompletely negated: it is still the *first* negation, not the infinite negation, not the negation of the negation. – Also being and thought, in being represented as quantitative determinations of the absolute substance, become as quanta completely external to each other, without connections, just as it is the case at a lower level for carbon, nitrogen, etc. It is a third, an external reflection, one that abstracts from their difference and recognizes their *inner* unity, but one that *exists only in itself*, not equally *for itself*. In fact, therefore, this unity is represented only as a first *immediate* unity, or only as *being* which, in

[60] *Anstoß*. [61] Fichte, *The Science of Knowledge* (1794), §1, pp. 159ff.; GA I.2.355ff.

[62] Fichte, *The Science of Knowledge* (1794), §1, pp. 194–195; GA I.2.361.

[63] The reference is to Schelling. Cf. Schelling, *Darstellung meines Systems der Philosophie* (1801, 1859), see §23, *Schellings Werke*, ed. Manfred Schröter (München, 1927), Vol. 3, p. 19: "Between the subject and the object there is *no other difference possible than a quantitative one* . . . Now since it is the same absolute identity which is posited as subject and object, there is no qualitative difference."

its quantitative difference, *remains* equal to itself but does not *posit* itself through itself as equal; consequently, it is not conceptually grasped as the negation of negation, as infinite unity. Only in the qualitative opposition does the posited infinitude, the being-for-itself, come to the fore and the quantitative determinateness itself, as we shall presently find out, pass over into the qualitative.[64]

Remark 2

It was earlier remarked that the *Kantian antinomies* display the opposition of the finite and infinite in a *more concrete* shape, applied to a more specific substrate of representation.[65] The antinomy that we were then considering contained the opposition of qualitative finitude and infinitude. In another, *the first* of the four cosmological antinomies, it is rather the quantitative limit and the conflict associated with it which is the issue. Here is the place, therefore, to undertake the examination of this antinomy.[66]

21.229 It concerns the *limitation or non-limitation of the world in time and space*. – The antithesis could just as well be considered with respect to time and space themselves, for whether time and space are relations of things themselves or only forms of intuition instead makes no difference to the antinomy of limitation or non-limitation in them.

A closer analysis of this antinomy will likewise show that both theses as well as their proofs (which, like those previously considered, are conducted apagogically) amount to nothing more than these two simple, opposed claims: *there is a limit*, and, *the limit must be transcended*.

The *thesis* is:

"*The world has a beginning in time, and in space it is also enclosed within limits*."

One part of the proof, concerning *time*, assumes the opposite:

"For if one assumes that the world has no beginning in time, then *up to every given point in time* an eternity has elapsed, and hence an infinite series of states of things in the world, each following another, has *passed by*. But now the infinity of a series consists precisely in that it can never be *completed* through a successive synthesis. Therefore an infinitely elapsed world-series is impossible, so a beginning of the world is a necessary condition of its existence – which was to be proved."[67]

The *other part* of the proof which concerns *space* also relies on time. To traverse the parts of a spatially infinite world and hold them together

[64] Cf. below, 21.235. [65] Cf. above, 21.180.
[66] For the following, cf. A416/B454ff. Hegel often paraphrases rather than cites Kant's text.
[67] Guyer/Wood translation, with slight modifications. Stresses added by Hegel.

would require an infinite time, and this time would have to be considered as elapsed if the world is to be viewed in space not as in becoming but as completely given. But it was shown of time in the first part of the proof that it is impossible to assume an infinite time as elapsed.

But one sees at once that it was unnecessary to make the proof apagogical, or even to conduct it at all, for the proof is itself directly based on the claim which was to be proved. Namely, assumed is some or any *given point in time* to which an eternity has elapsed (eternity has only the meager meaning here of a bad temporal infinity). Now, *a given point in time* has no other meaning than that of a determinate *limit* in time. In the proof, therefore, a limit is *presupposed* to time which is actual; but *that* is just *what was to be proved*. For the thesis is, that the world has a beginning in time. **21.230**

There is only this difference, that the *assumed* limit is a *now* which comes at the end of a time just elapsed, whereas the *now* to be proved is at the beginning of a future time. But this difference is unessential. The *now* is assumed as the point at which an infinite series of successive states of things is supposed to have flowed away in time, therefore to be an end, a *qualitative* limit. If this *now* were considered as only a quantitative limit that flows on and is there, not simply to be surpassed, but as itself self-surpassing, then the infinite time series would not have *flowed away* in it but would go on flowing, and so the nerve of the proof would fall. On the other hand, if the temporal point is assumed to be the qualitative limit of the past, in which case it is equally the *beginning* of a future – for each temporal point is *in itself* the connection of the past and the future – then the point is also the *absolute*, that is, abstract, *beginning* of that future, and this is what was to be proved. It is irrelevant that there is already a past preceding its future at this point; for the temporal point is a qualitative limit (and that it is to be taken as qualitative rests on its determination of being *completed*, elapsed, and *therefore of not continuing*), and so time is *interrupted* in it; the past is then without connection to a future that could be called such only in respect to it, and therefore, without this connection to a future, itself only time in general, which has an absolute beginning. But if the future were to stand in connection with the past (as indeed it does) through the now, the given point of time, and in this way were determined as future, then this point of time also, from the other side, would not be a limit; the infinite time series would continue in what was called the future, and would not be, as assumed, *completed*.

The truth is that time is pure quantity. The *point* which the proof uses, and in which time is supposed to be interrupted, is rather the *self-sublating*

being-for-itself of the now. All that the proof does is to picture the time limit which in the thesis is claimed to be absolute as a *given point of time*, and straight away to assume it as completed, that is, as an abstract point –
21.231 a popular determination which sense-representation easily lets pass for a *limit*, thus allowing as assumption in the proof what earlier had been put forward as the thing to be proved.

The *antithesis* runs:

"*The world has no beginning and no limits in space, but is infinite with regard to both time and space*."

Here too the *proof* assumes the opposite:

"For suppose that it has a beginning. Since the beginning is an existence preceded by a time in which the thing is not, there must be an antecedent time in which the world was not, that is, an empty time. But now *no arising* of any sort of thing is possible in an empty time, because no part of such a time has, in itself, prior to another part, any *distinguishing condition* of its existence rather than its non-existence. Thus many series of things may begin in the world, but the world itself cannot have a beginning, and so is infinite with respect to past time."[68]

Like the others, this apagogical proof contains the direct and unproved assertion of what is supposed to be proved. For it first assumes a beyond of the existent world, an empty time; but it then goes on to *continue the existence of this world beyond itself into the empty time*, sublates this time thereby, and consequently *extends the existence to infinity*. The world is an existence; the proof *presupposes* that this existence *arises*, and that its arising has an *antecedent condition* in time. But *the antithesis* itself is just this, that there is no unconditional existence, no absolute limit, but that the existence of the world always demands an *antecedent condition*. What was to be proved thus finds itself in the proof as assumption. – Further, the *condition* is then sought in the empty time, and this is as much as saying that it is assumed as temporal and consequently as existence, and as something restricted. The general assumption, therefore, is that the world presupposes as existence another conditioned existence in time – and so on, therefore, to infinity.

The proof regarding the infinity of the world in *space* is the same. The spatial finitude of the world is apagogically posited: "for it would then exist in an empty unlimited space and would stand in *relation* to it; but such a relation of the world to *no* object is a nothing."[69]

[68] Guyer/Wood translation, with slight modification. Hegel skips one clause of Kant's text.
[69] Kant's text is much abbreviated.

What was supposed to be proved is here, too, directly presupposed in the proof. It is directly assumed that the spatially delimited world is to be found in an empty space and that it stands in *relation* to this space, that is, that there must have been a *move transcending* it – on the one hand, a move into emptiness, into the beyond and the *non-being* of the world; but, on the other hand, in order that the world remains in *relation* to that empty space, that is, so that it *continues* in it, that beyond is to be represented as filled with world-like existence. The infinity of the world in space which is asserted in the antithesis is nothing else than, on the one hand, the empty space, and, on the other, the *relation* of the world to it, that is to say, its continuity into space or the filling of space. And this contradiction, that time is simultaneously empty yet filled, is the infinite progression of determinate existence. The contradiction itself, the relation of the world to empty space, is made the foundation on which the proof rests. **21.232**

The thesis and antithesis and their proofs produce nothing more, therefore, than the opposed claims, that a *limit is*, and that the limit is just as much a *sublated* one; that the limit has a beyond with which it is however *connected* and into which it must pass, but in which there arises, however, another such limit, which is no limit.

The *solution* of these antinomies, as of those previously mentioned, is transcendental, that is, it consists in the assertion of the ideality of space and time as forms of intuition, by which is meant that the world does not contradict itself *within*, is not something that sublates itself, but that *consciousness* alone, in its intuition and in the connection of intuition to understanding and reason, is rather the being which is self-contradictory. It is an excessive tenderness for the world to keep contradiction away from it, to transfer it to spirit instead, to reason, and to leave it there unresolved. In fact, spirit is the one which is strong enough that it can endure contradiction, but it is spirit again which knows how to resolve it. But nowhere does the so-called world – call it the objective, real world, or, in the manner of transcendental idealism, subjective intuition and sense-content determined by the category of the understanding – nowhere, however you call it, does it escape contradiction; but it is not capable of enduring it and for that reason it is left to the mercy of the coming and ceasing to be. **21.233**

c. The infinity of quantum

The *infinite quantum* as *infinitely great* or *infinitely small* is itself, in itself, the infinite progress; as great or small it is a quantum and at the same time

the non-being of quantum. The infinitely great and the infinitely small are, therefore, figurative representations which on closer inspection prove to be but unsubstantial nebulous shadows. In the infinite progress, however, this contradiction is explicitly present and with it that which constitutes the nature of quantum which, as intensive magnitude, has attained its reality and is now *posited* in its *existence* as it is in its *concept*. We must now consider this identity.

Quantum is as degree simple, self-referred, and determined within it. Because the otherness and the determinateness are sublated in it through this simplicity, the determinateness is external to it; it has its determinateness outside it. This, its being-outside-itself, is at first the *abstract non-being* of quantum in general, the bad infinity. But further, this non-being is also a magnitude; quantum continues in its non-being, for it is precisely in its externality that it has its determinateness, and this, its externality, is itself therefore equally a quantum; the non-being of quantum, the infinity, is thus limited, that is, this beyond is sublated, is itself determined as a quantum which, consequently, in its negation is with itself.

But this is what quantum as such is *in itself*. For through its externality it
21.234 is precisely *itself*; the externality constitutes that in virtue of which quantum is quantum, where it is with itself. In the infinite progress, therefore, the *concept* of quantum is *posited*.

If we now first look at this progress in its abstract determinations as they are displayed before us, what we find in it is *the sublating of quantum*, *but no less also of its beyond*; what we find, therefore, is *the negation of quantum as well as the negation of this negation*. Its truth is the unity of these two negations in which the negations are, but as moments. – This unity is the resolution of the contradiction of which the infinite progress is the expression; its most immediate meaning, therefore, is that of the *restoration of the concept of magnitude*, of being an indifferent or external limit. On the subject of the infinite progress as such, the only reflection which is usually made is that each quantum, however great or small, can disappear, that it must be possible to transcend it – not, however, that this sublating of the quantum, the beyond, the bad infinite itself, also disappears.

Even the *first* sublating, the negation of quality as such whereby the quantum is posited, is *in itself* the sublation of negation – quantum is sublated qualitative limit, consequently sublated negation – but it is at the same time only *in itself*; the sublating is posited as an existence, and its negation is then fixed as the infinite, as the side beyond quantum, while the latter remains on its side as *an immediate*; thus the infinite is determined

only as *first* negation and it is in this way that it appears in the infinite progress. But there is more to it, as has just been shown: there is the negation of negation or what the infinite is in truth. And this we have just seen with the restoration of the *concept* of quantum. Such a restoration means, in the first place, that to the existence of the quantum there has accrued a more precise determination. What we now have is *quantum determined* **21.235**
according to its concept, and this quantum is different from the *immediate quantum*: externality is now the opposite of itself, is posited as a moment *of magnitude*; quantum, for its part, is posited as having its *determinateness* in another quantum, through the intermediary of its non-being, of infinity, that is, that it is *qualitatively* what it is. Yet this comparison of the *concept* of quantum with its existence belongs more to our reflection, to a relation which is not yet present here. The next determination, rather, which is present here is that quantum has returned to *quality*, is from now on *qualitatively* determined. For its defining property, its quality, is externality, the indifference of the determinateness; and quantum is now posited rather as being itself in its externality, of referring to itself therein, of being in simple unity with itself, that is, of being *qualitatively* determined. – This qualitative being is still more closely determined, namely as being-for-itself; for the very self-reference which quantum has attained has proceeded from mediation, from the negation of the negation. Quantum no longer has infinity, the being-determined-for-itself, outside it, but in it.

The infinite, which in the infinite progress only has the empty meaning of a non-being, of an unattained but sought beyond, is in fact nothing other than *quality*. Quantum, as indifferent limit, surpasses itself into the infinite; it thereby seeks nothing else than its being-determined-for-itself, the qualitative moment which, however, is only an ought. Its indifference towards the limit, and hence its lack of a determinateness which is an existent-for-itself, its surpassing itself, is that which makes the quantum what it is. This, its surpassing, is to be negated and quantum is to find in infinity its absolute determinateness.

Quite generally: quantum is sublated quality; but quantum is infinite, it surpasses itself, is the negation of itself; this, its surpassing, is therefore *in itself* the negation of the negated quality, the restoration of it; and what is **21.236**
posited is that the externality, which seemed to be a beyond, is determined as quantum's *own moment*.

Quantum is thus posited as repelled from itself, and with that there are two quanta which are however sublated, only moments of *one unity*, and this unity is the determinateness of quantum. – Quantum, *self-referred* as indifferent limit and hence qualitatively posited, is the *quantitative relation*

or *ratio*. – In ratio quantum is external to itself, different from itself; this, its externality, is the reference connecting a quantum to another quantum, each quantum acquiring value only in this connection with its other; and this reference constitutes the determinateness of the quantum which is this unity. In this unity quantum possesses not an indifferent but a qualitative determination; in this its externality has turned back into itself; it is in it what it is.

Remark 1

The conceptual determination of the mathematical infinite

The *mathematical infinite* is of interest because of the expansion and the significant new results which its introduction into mathematics has produced in it, but also because of the oddity that this science has to date still been unable to justify its use conceptually ("concept" being taken here in a strict sense). Ultimately, the justifications are made to rest on the *correctness* of the *results* obtained with the help of this infinite *as demonstrated on other grounds*, not on the clarity of the subject matter and of the operation by which the results are obtained; indeed, the operation itself is even admitted as incorrect.[70]

This alone is in and for itself a deplorable situation; this way of doing things is unscientific. But there is a further disadvantage that goes with
21.237 it. As long as mathematics does not know the nature of its instrument by failing to master the metaphysics and critique of the infinite, it cannot determine the scope of its application and cannot secure itself against the misuse of it.

But from a philosophical point of view the mathematical infinite is important because underlying it, in fact, is the concept of the true infinite, and this infinite stands much higher than the usual so-called *metaphysical infinite* from which the objections against the other infinite, the mathematical, are made. The normal recourse that the science of mathematics has against these objections is to deny the competence of metaphysics by claiming that it has nothing to do with this science and that it need not trouble itself with its concepts as long as it operates consistently with its own principles. The task of mathematics is to consider what is true within its own domain, not what is true in itself. Metaphysics, while objecting to the mathematical infinite, is aware that it can neither deny nor upset the brilliant results of its use, and mathematics, for its part, is aware that

[70] Hegel is referring to the belief, common at the time, that calculus was based on approximations, and that infinitesimal differences could ultimately be dropped without any significant error in the results because of their minuteness.

it is not clear about the metaphysics of its own concept and also, therefore, about the derivation of the procedures necessitated by the use of the infinite.

If the only difficulty affecting mathematics came from the *concept* in general, then mathematics could brush it aside without more ado since the concept is more than just the statement of the essential determinacies of a fact, that is, of its determinations according to the understanding, and, so far as *precision* in such definitions goes, mathematics leaves nothing to be desired: it is not a science that concerns itself with the concepts of its subject matter and which would have to generate their content by developing the concept, even if only by means of ratiocination. But mathematics finds in the method of its infinite a *major contradiction* to the very *method* which is *specific to it* and on which it rests as a science. For the infinitesimal calculus permits, even requires, procedures which mathematics must absolutely reject when operating with finite magnitudes, and at the same it treats its infinite magnitudes as if they were finite quanta and insists on applying to them the same procedures which are valid for these; a significant aspect of the formation of this science has been its success in applying to *transcendent* determinations and their treatment the form of ordinary calculus. **21.238**

Mathematics shows that, despite the conflict inherent in its operations, the results that it obtains through them wholly agree with those found by the strictly mathematical method, namely the geometrical and analytical. But, for one thing, this does not apply to all results; the purpose of introducing the infinite is not solely to shorten the ordinary procedure but to achieve results unattainable through it. And for another, *success* does not by itself justify the *mode* of *procedure*, and in infinitesimal calculus the method is seen to be afflicted by a seeming *inexactitude*. After the finite magnitudes have been increased by an infinitely small quantity, in the subsequent operation this quantity is partly retained and partly ignored. What is remarkable about this procedure is that, despite the admitted inexactitude, the derived result is one which is not just *fairly* close, or *close enough* that the difference can *be disregarded*, but is, on the contrary, *perfectly exact*. In the *operation* itself which precedes the result, however, one *cannot dispense* with the fiction of a something which is not quite null, yet is so *inconsiderable* that it can be left out of account. But mathematical determinateness, as we understand it, excludes the possibility of a greater or lesser degree of exactitude, just as in philosophy there can be no question of a greater or lesser probability but of truth alone. Even if the method and use of the infinite is justified by the success, it is nevertheless not so superfluous to ask for its justification, so superfluous as it patently would be to ask, with respect to

one's nose, for a proof of the right to use it. For to deal in proof is essential to mathematical cognition, since it is scientific cognition; and even with respect to results, the fact is that rigorous mathematical method does not certify them all with success, which is an external piece of evidence anyway.

It is a worth the effort to take a closer look at the concept of the infinite together with the most notable attempts at justifying its use and removing the difficulty with which the method feels encumbered. The consideration of these attempts at justifying and determining the mathematical infinite
21.239 which I shall undertake at some length in this Remark will at the same time throw the best light on the nature of the true concept itself; it will also show how there was an intimation of this concept in such attempts and that it actually lay at their basis.

The usual definition of the mathematical infinite is that it is a *magnitude of which there is no greater* (when it is defined as the infinitely great) *or smaller* (when it is defined as the infinitely small), or, in the former case, which is greater than, in the latter case smaller than, any given magnitude. – In this definition the true concept is of course not expressed; what is expressed is rather, as already remarked, the same contradiction which is present in the infinite progression. But let us see what there is *implicitly* contained in it. In mathematics, a magnitude is defined as something which can be increased or diminished; in general, therefore, as an indifferent limit. Now since the infinitely great or small is such that it can no longer be increased or diminished, it is no longer in fact a *quantum* as such.

This consequence follows necessarily and directly. But it is this reflection, that quantum is sublated (and in this Remark I call quantum what quantum is as such, finite quantum), which is not commonly made, and is the source of difficulty for ordinary thinking; for in so far as quantum is infinite and therefore sublated, it requires being thought as something which is not a quantum and yet *retains its quantitative determinateness*.

Kant did not find the said definition to accord with what one normally means by an *infinite whole*. To cite his judgment:[j] "According to common understanding, a magnitude is infinite if none greater than it (that is, greater than the *multiple* of a given unit contained in it) is possible. Now no multiple is the greatest, because one or more units can always be added to it. [. . .] The infinite whole does not represent *how great* it is, hence this
21.240 concept is not the concept of a *maximum* (or minimum); rather, it thinks only of the *relation* to an arbitrarily assumed *unit*, in respect of which it is greater than any number. Depending on whether the unit is assumed to be

[j] In the Remark to the Thesis of the First Cosmological Antinomy, in the *Critique of Pure Reason*.

greater or smaller, the infinity would be greater or smaller; yet infinity, since it consists merely in the *relation* to the given unit, would always remain the same, even though in this way the absolute magnitude of the whole would obviously not be cognized at all."[71]

Kant objects to infinite wholes being regarded as a maximum, the *completed* aggregation of a given unit. The maximum or minimum as such still appears as a quantum, an aggregate. This way of representing the infinite cannot avert Kant's conclusion that it leads to a greater or smaller infinite. And in general, so long as the infinite is represented as a quantum, the distinction between greater and smaller still applies to it. This criticism, however, does not touch the concept of the true mathematical infinite, of infinite non-indifference, for this is no longer a finite quantum.

Kant's concept of the infinite, on the other hand, which he calls the truly transcendental one, is "that the successive *synthesis* of unity in the traversal of a quantum can *never be completed*."[72] So a quantum in general is presupposed as given; this is supposed to be converted by the synthesizing of the unit into an amount, a definite assignable quantum; but this process of synthesis can never be completed. Clearly, what is expressed here is but a progress to infinity, except that the progress is represented *transcendentally*, that is, in fact subjectively and psychologically. True, in itself the quantum is supposed to be completed, but transcendentally; that is to say, the only determination which should arise in the *subject* that gives it a *relation* to a unit is that of an incomplete quantum intrinsically affected by a beyond. We still are, therefore, at the contradiction contained in magnitude, except that it is now distributed between the object and the subject: limitedness is assigned to the object, and to the subject the capacity to transcend over and over again, in a bad infinite, any determinateness it grasps. **21.241**

We said above that, on the contrary, the definition of the mathematical infinite, precisely as it is used in higher analysis, corresponds to the concept of the true infinite.[73] Here is the place for a detailed comparison of the two. – First to be said regarding the truly infinite quantum is that it determines itself as infinite *within*; it is such because, as demonstrated,[74] the finite quantum or the quantum as such and its beyond, the bad infinite, are *equally* sublated. The sublated quantum has thus gone back into the simplicity of self-reference, but not as the extensive quantum did when it went over into the intensive quantum, by having its determinateness only *in itself*, in an external multiplicity with respect to which it is nevertheless

[71] Guyer/Wood, A430/B458–A432–460. The text is slightly modified by Hegel.
[72] Guyer/Wood, A432/B460. Stresses added by Hegel.
[73] Cf. above, 21.237. [74] Cf. above, 21.234; also GW 11, 153.

supposed to remain both indifferent and diverse. On the contrary, the infinite quantum contains first the externality, and then the negation of it, in it; it no longer is, therefore, just some finite quantum or other, no longer a magnitude-determinateness which happens to have a *determinate existence* as *quantum*; it is rather simple, and therefore only a *moment*; it is a magnitude-determinateness in *qualitative* form; its infinity consists in its being a *qualitative determinateness*. – As moment it is thus in essential unity with its other; it is determined only through this, its other; that is, it has meaning only with reference to something which stands *related* to it. *Outside this relation* it is a *nullity* – just because quantum as such would have to be indifferent *to the relation* and yet in the relation an *immediate*, unmoved determination. In *the relation*, as only a moment, quantum is not something indifferent, is not for itself; since it is at the same time a quantitative determinateness, in the infinity which is being-for-itself it is only as a being-for-one.

The concept of the infinite as abstractly expounded here will prove to be
21.242 the basis of the mathematical infinite, and the concept itself will be further clarified as we consider the different stages in the expression of quantum *as moment of a ratio* – from the lowest, where it is still also quantum as such, to the highest, where it attains the meaning and the expression of a properly infinite magnitude.

Let us then first take quantum in the *relation* in which it is a *fractional number*. A fraction such as, for instance, $\frac{2}{7}$ is not a quantum like 1, 2, 3, and so on; to be sure, it is an ordinary finite number, but not an immediate number like the whole numbers; rather, as a fraction it is determined through the intermediary of *two other numbers* which stand to one another as amount and unit, the unit being itself a determined amount. However, if we abstract them from this close determination which they have to each other, and consider them in the qualitative connection in which they are here only according to what befalls them as quanta, then 2 and 7 are indifferent quanta; but since they take their place here only as *moments*, each a moment of the other and therefore of a third (the quantum which is called the exponent), they at once count not as 2 and 7 but only as determined *with respect to each other*. We can, therefore, just as well put 4 and 14 in their place, or 6 and 21, and so on to infinity. In this, they begin to take on a qualitative character. Were they to count as mere quanta, 2 and 7 would then simply be 2 and 7 respectively; the 4, 14, 6, 21, and so on, would be something simply different from them and, to the extent that they are only immediate quanta, could not be entered in their place. But in so far as 2 and 7 are not to be taken in the determinateness of such mere quanta,

their indifferent limit is then sublated; to this extent, therefore, they have the moment of infinity in them, for not only are they no longer 2 and 7, but their quantitative determinateness remains, although in qualitative existence – namely, as the determinateness which they have in relation. Their place can be taken by infinitely many others without the value of the fraction being altered by the determinateness of the relation. **21.243**

However, the representation of the infinite by a fractional number is still imperfect, because the two sides of the fraction, 2 and 7, can be taken out of the relation and are ordinary, immediate quanta; the connection which makes them moments in a ratio affects them externally and immediately. The *connection* itself is also an ordinary quantum, the exponent of the ratio.

The *letters* with which general arithmetic operates, the next universality to which numbers are elevated, do not have a determinate numerical value defining them; they are only general signs standing in for some possible determinate value. The fraction $\frac{a}{b}$ seems to be, therefore, a more suitable expression of the infinite, since a and b, taken apart outside their connecting reference, remain indeterminate, lacking any particular value of their own even when separated. – However, although these letters are posited as indeterminate magnitudes, their meaning is still to be some finite quantum or other. Therefore, since they are a universal representation, but only of *determinate number*, their being in a ratio is likewise a matter of indifference to them; outside the ratio, they retain the value of determinate number.

If we look more closely at what is present in a ratio, we see that it contains two determinations: first, that it is a quantum; but, second, that this quantum is not immediate but contains rather qualitative opposition within it, and since in this opposition it remains at the same time a determinate and indifferent quantum, by returning from its otherness, that is, the opposition, back into itself, it is also an infinite. These two determinations are seen displayed in their distinctness in the following well-known form.

The fraction $\frac{2}{7}$ can be expressed as 0.285714 . . . ; $\frac{1}{1-a}$, as $1 + a + a^2 + a^3$ and so on. As so expressed, it is an *infinite series*; the fraction itself is called the sum or the *finite expression* of the series. If we compare the two expressions, then the one, the infinite series, no longer represents the **21.244** fraction as a ratio but represents it in its aspect as a quantum which is an *aggregate* of magnitudes which are added to each other, as an amount. – That these magnitudes constituting the amount consist in turn of decimal fractions, that is, themselves consist of ratios, is irrelevant here; for this circumstance concerns the particular kind of *unit* of these magnitudes,

not these magnitudes as constituting the *amount*; likewise in the decimal system an integer of more than one digit counts as one *amount*, and the fact is ignored that it consists of *product*s – a *number*, the *number ten*, and their powers. Also of no consequence here is the fact that there are fractions other than the $\frac{2}{7}$ adduced as example which, when expressed as decimal fractions, do not yield an infinite series; what is relevant is that every fraction can be expressed as yielding an infinite series in a numerical system based on another unit.

Now since in the infinite series that displays the fraction as amount the ratio aspect of the latter disappears, so does also the aspect by which, as just shown,[75] it had infinity *in it*. But this infinity has entered in another way, for the series is itself infinite.

Now, of what kind this infinity of the series would be is self-evident; it is the bad infinity of progression. The series exhibits the contradiction inherent in it of representing something which is a relation, and possesses *qualitative* nature within it, as without relation, as a mere *quantum*, as amount. The consequence is that there is something always lacking to the amount expressed in the series, so that the posited amount must always be gone beyond in order for the required determinateness to be attained. The law of the progression is well known; it is implicit in the determination of the quantum contained in the fraction and in the nature of the form in which the fraction is supposed to be expressed. By pressing on with the series the amount might well be made as precise as *need be*; nevertheless, what is displayed through the series always remains an *ought*; the series is always
21.245 affected by a beyond which cannot be sublated, for the attempt to express as an *amount* something which is based on a qualitative determinateness is an *abiding contradiction*.

The inexactitude of which there is only a reflective shine in the true mathematical infinite is actually present in this infinite series. These *two kinds of mathematical infinite* are as little to be confused as the two kinds of philosophical infinite. For the exposition of the true mathematical infinite, *the form of the series* has been used from the beginning and of late it has been invoked again. But it is not necessary for it. On the contrary, the infinite of the infinite series is essentially different from it, as the sequel will show. The infinite serial expression ranks even lower than the fractional expression.

The fact is that the *infinite series* contains the bad infinite because what the series is supposed to express remains an *ought*, and what it does express

[75] Cf. above, 21.242.

is encumbered by a beyond which does not go away, and it is *diverse* from what it is supposed to express. It is infinite not because of the posited terms, but because such terms are incomplete, since the other which belongs to them essentially is beyond them; what the series actually contains (let the terms posited be as many as one wishes) is only something finite, in the strict sense of being posited as finite, that is, as something *which is not what it ought to be*. On the other hand, what is called the *finite expression* of such a series, or the *sum* of it, is without lack; it contains whole the value which the series only seeks; the beyond is recalled from its flight; what it is and what it ought to be are not separated but are the same.

More precisely, what distinguishes the two expressions is that in the infinite series the *negative* lies *outside* its terms, and these have a valid place in the series only as parts of the *amount*. By contrast, in the finite expression which is a ratio the negative is immanent: it is the *reciprocal* being-determined of the sides of the ratio, and this being-determined is a being-turned-back into itself, self-referring unity as a negation of the negation (*both* sides of the ratio are only as moments), and consequently **21.246**
has the determination of infinity *within itself*. – Therefore, what is ordinarily *called* the sum, like the $\frac{2}{7}$ or the $\frac{1}{1-a}$, is in fact a *ratio*, and this so-called *finite expression* is the true *infinite expression*. On the other hand, the infinite *series* is in truth the *sum*; its purpose is to display what is in itself a ratio in the form of a sum, and the existing terms of the series are not the terms of a sum but of an aggregate. Furthermore, it is in fact the *finite expression*, for it is incomplete as an aggregate, thus remaining essentially deficient. According to that which is there in it at the moment, it is a determinate quantum, but at the same time not quite what it ought to be; and also, what is lacking from it is itself a determinate quantum, and this missing part is in fact that in the series which is called the infinite – but according to its only formal aspect of being something missing, a *non-being*; according to its content, it is a finite quantum. Only that which is present in the series, together with that which is missing from it, constitute the fraction, the determinate quantum which the series *ought* to be yet is equally incapable of being. – The word "infinite," even in "infinite series," is commonly taken to mean something lofty and exalted; but this is a sort of superstition, the superstition of the understanding, for we have just seen how it boils down instead to a determination of *deficiency*.

We may further remark that the fact that there are infinite series that cannot be summed is an external and accidental circumstance in so far as the form of series as such is concerned. Such series contain a higher kind of infinity than do those that can be summed – namely, they contain

incommensurability, or the impossibility of displaying as a quantum, even if in the form of a fraction, the quantitative ratio that they contain; it is their *form as series* which as such entails the determination of the bad infinity present in the series which admits of being summed.

We find a like reversal of terms, as just noted in connection with the fraction and the series associated with it, also when the *mathematical* infinite (not the one just mentioned but the true infinite) is called the *relative*
21.247 infinite, whereas the ordinary *metaphysical* infinite, by which the abstract bad infinite is understood, is called *absolute*. But in fact this metaphysical infinite is the one which is rather merely relative, because the negation which it expresses is in opposition to a limit only by *persisting* outside the infinite, without being sublated by the latter; the mathematical infinite, on the contrary, has in itself truly sublated the finite limit, for this limit is at one with its beyond.

It is primarily in this sense, which shows that the so-called sum or finite expression of an infinite series is the one to be regarded rather as the infinite expression, that Spinoza contrasts the concept of the true infinity with that of the bad, illustrating it with examples. This concept of Spinoza will best be elucidated if I add what he says on the subject to my exposition so far.

He starts by defining the *infinite* as the *absolute* affirmation of the concrete existence of any one nature, and the finite on the contrary as *determinateness*, or *negation*.[76] That is to say, the absolute affirmation of a concrete existence is to be taken as its *referring to itself*, its not being dependent on another; the finite is negation instead, a cessation in the form of a *reference* to an *other* which begins *outside it*. Now the affirmation of a concrete existence does not by any means exhaust the concept of infinity; the full concept implies that the infinity is an affirmation, not as immediate but only as restored through the reflection of the other into itself, or as the negation of the negative. But for Spinoza substance and its absolute unity has the form of an unmoved unity, that is, a unity which is not self-mediated, a rigidity in which there is no place yet for the concept of the negative unity of the self, of subjectivity.

The mathematical example with which he illustrates the true infinite (Letter XXIX)[77] is that of a space between two unequal circles, one of which lies inside the other without touching it and without the two being concentric. He apparently made a lot of this figure and the concept that it illustrates, so much so as to make it the motto of his *Ethics*. – He

[76] *Ethics*. Part I, Prop. VIII, Note I.

[77] Cf. Letter XXIX (Gebhard's XII), to Lewis Meyer, in which Spinoza first distinguishes between types of infinites and then proceeds to illustrate them with examples (English trans., pp. 317–318).

says: "Mathematicians conclude that the inequalities possible within such a space are infinite, not because of the infinite *multitude* of parts, for the *magnitude* of the space is *determinate* and *limited*, and I am capable of **21.248** positing larger or smaller such spaces, but because the *nature of the matter* surpasses every determinateness."[78] – One can see that Spinoza rejects any representation of the infinite that would make it an incomplete multitude or series, and calls attention to the fact that here, in the space of the example, the infinite is not somewhere beyond, but is present and complete; such a space is a limited one, but finite "because the nature of the subject matter surpasses every determinateness"; because the magnitude determinations contained in it cannot be at the same time displayed as a quantum, or, according to Kant's already cited terminology,[79] the *synthesizing* cannot be brought to completion in a (discrete) quantum. – How in general the opposition of *continuous* and *discrete* quantum leads to the infinite will be explained in detail in a later Remark.[80] – Spinoza calls the infinite of a series *the infinite of the imagination*; the infinite as self-reference he calls instead the *infinite of thought* or *infinitum actu*. For it is *actu*, infinite *in act*, because complete and present within itself. Thus the series $0.285714\ldots$ or $1 + a + a^2 + a^3 \ldots$ is the infinite merely of the imagination or a merely intended infinite, for it has no actuality, there is simply something missing to it. By contrast, $\frac{2}{7}$ or $\frac{1}{1-a}$ is *actually* not only what the series is in its presently given terms, but is, in addition, what the series lacks, what it only *ought to be*. The $\frac{2}{7}$ or $\frac{1}{1-a}$ is equally a finite magnitude like Spinoza's space enclosed between the two circles, with its inequalities, and can like this space be made larger or smaller. But there is no absurdity that arises here of a larger or smaller infinite, for this quantum of the whole does not concern the relation of its moments which is *the nature of the fact*, that is, does not concern the qualitative determination of magnitude; as for the infinite series, what *is* actually *there* is equally a finite quantum, but with yet a deficit besides it. – The imagination on the contrary stops short at the quantum as such without reflecting on the qualitative connection which constitutes the ground of the occurring incommensurability.

The incommensurability which lies in Spinoza's example encompasses in general the functions of curved lines and is more accurately associated with the infinite which mathematics has introduced in connection with these functions, quite in general with the *functions of variable magnitudes*. **21.249** This infinite is the *true mathematical*, quantitative infinite which Spinoza

[78] Spinoza, Letter XXIX (Gebhardt's XII), to Lewis Meyer (English trans., pp. 321–322).
[79] Cf. above, 21.240. [80] Cf. below, 21.299–301.

also had in mind. We must now discuss this determination with greater precision.

First of all, with respect to the category of *alterability* which is held as so important and which covers the magnitudes connected with those functions, such magnitudes should not be assumed from the start to be alterable in the sense in which the numbers 2 and 7 are in the fraction $\frac{2}{7}$, that is, because 4 and 14, 6 and 21, and other numbers *ad infinitum*, can be put in their place without the value of the fraction being altered. This applies even more to $\frac{a}{b}$, where one can arbitrarily introduce any number in the place of a and b without altering what $\frac{a}{b}$ is supposed to express. It is now in the sense that an infinite, that is, an inexhaustible *multitude* of numbers, can also be put in the place of the x and y of a function, that a and b are magnitudes just as variable as these x and y. The expression "variable magnitudes" is for this reason very vague and ill-chosen for magnitude-determinations whose interest and manner of treatment lies in *something quite other* than in their mere variability.

In order to make clear wherein lies the true determination of those moments of a function which are the object of interest of higher analysis, we must retrace our steps once more. In $\frac{2}{7}$ or $\frac{a}{b}$, the 2 and 7 are independent determinate quanta and the connection is not essential to them; a and b are likewise intended to represent quanta which remain as they are outside the relation. Furthermore, $\frac{2}{7}$ and $\frac{a}{b}$ are also a fixed quantum, a quotient; the ratio constitutes an amount of which the denominator expresses the unit and the numerator the amount of these units, or conversely; even if 4 and 14, and so on, are substituted for 2 and 7, the ratio also remains the same as quantum. But now, all this changes essentially, for instance, in the function $\frac{y^2}{x} = p$; here x and y carry indeed the meaning of possible
21.250 determinate quanta; however, not these x and y, but only x and y^2 have a determinate quotient. Therefore, not only are these *sides* of the ratio, x and y, not determinate quanta, but their ratio also is not a fixed quantum (and not in the sense in which it is not fixed in the case of a and b), is not a fixed quotient but is absolutely *variable as quantum*. But this is only to say that x is related not to y but to the *square* of y. The relation of a magnitude to a *power* is not a *quantum* but an essentially *qualitative* relation; the *power-relation* is *the factor* which is to be regarded as the *fundamental determination*. – However, in the function of the straight line, $y = ax$, $\frac{y}{x} = a$ is an ordinary fraction and quotient; this function is therefore a function of variable magnitudes only *formally*, or x and y are here what a and b are in $\frac{a}{b}$: they are not in the determination in which differential and integral calculus considers them. – Because of the *special*

nature of the variable magnitudes in this mode of consideration, it would have been fitting to have introduced a special name for them as well as other *symbols* than the ones generally in use for the *unknown quantities* in all the finite equations, determinate or indeterminate; for there is an essential difference between them and such merely unknown quantities which are in themselves perfectly determined quanta or a determinate range of determinate quanta. – It is, moreover, because of a lack of insight into the peculiar interest which motivates higher analysis, and caused the need and the discovery of differential calculus, that functions of the first degree, like the equation of the straight line, have independently been included in the treatment of calculus. Contributing to this formalism is the mistaken belief that the otherwise intrinsically valid demand that a method be *generalized* can be satisfied by leaving out the *specific* determinateness **21.251**
on which the original need is based, as if in this domain one treated only *variable magnitudes in general*. We would have been spared indeed much formalism in the consideration and the treatment of these matters if it had been perceived that at issue here are not variable magnitudes as such, but the *determinations of powers*.

But there is still another stage where the mathematical infinite manifests its peculiar character. In an equation in which x and y are first posited as determined by a power-relation, x and y as such are still supposed to signify quanta; now this whole significance is entirely lost in the so-called *infinitesimal differences*. dx, dy, are no longer quanta, nor should they signify quanta, but have meaning only in connection, *the meaning of mere moments*. They no longer are a *something*, the something taken as quantum, nor are they finite differences; but *neither* are they *nothing*, not a null void of determination. Outside their relation they are pure nullities; but they are to be taken only as moments of the relation, as *determinations* of the differential coefficient $\frac{dx}{dy}$.

In this concept of the infinite, the quantum is truly made complete as a qualitative existence; it is posited as actually infinite; it is not just sublated as this or that quantum, but as quantum generally. But the *quantitative determinateness remains*; it remains as the *element* of the quanta, as principle, or, as has also been said, in *their first concept*.

It is this concept which has been the target of every attack made on the fundamental determination of the mathematics of this infinite, that is, of differential and integral calculus. Incorrect representations on the part of mathematicians themselves were instrumental to this failure to recognize the concept; but the disputes were mainly due to the incapacity to justify the subject matter as *concept*. But mathematics, as remarked

above,[81] cannot circumvent the concept here; for, as the mathematics of the infinite, it does not restrict itself to the *finite* determinateness of its objects (as pure mathematics does, which considers space and time and
21.252 their determinations only as finite, referring them to each other), but treats any determination which it takes from pure mathematics by converting it into an *identity with its opposite* – as when, for instance, it converts a curved line into a straight one, the circle into a polygon, and so on. The operations which mathematics allows itself as differential and integral calculus are therefore in total contradiction with the nature of merely finite determinations and their connections, and for this reason can find their justification in the *concept* alone.

The mathematics of the infinite insisted that these quantitative determinations are vanishing magnitudes, that is, such that are no longer some quantum or other, but that are not nothing either but still have a *determinateness as against an other*. Yet nothing is more evident than that there is no such *intermediate state*, as it has been called, between being and nothing. – What there is to this objection and to this so-called intermediate state has already been indicated above in connection with the category of becoming, in Remark 4.[82] At any rate, the unity of being and nothing is not a *state*; a state would be a determination of being and nothing into which these moments would have fallen as if by accident, as if prey to a sickness externally induced by faulty thinking; rather, this middle and unity, the vanishing, or equally the becoming, is alone the *truth* of being and nothing.

It is further said that what is infinite is not *comparable* as a greater or smaller; there cannot therefore be a relation of infinite to infinite according to orders or dignities of the infinite, although we do find such distinctions of infinitesimals in the science dedicated to them. – Underlying this already mentioned objection[83] is always the supposition that we should be dealing here with *quanta* which are compared as quanta; and that when determinations are no longer quanta, they no longer have a relation to each other. But the case is rather that that which exists *only* in relation is not a quantum; quantum is a determination which should possess a perfectly indifferent existence outside the relation it is in and be indifferent to its difference from another quantum; the qualitative, on the contrary, is what it is only in its distinction from an other. The infinite magnitudes of calculus are, therefore, not only comparable, but exist only as terms of comparison, in relation.

[81] Cf. above, 21.237. [82] Cf. above, 21.90ff. [83] In the preceding page.

Let me review the most important definitions of this infinite which have been given in mathematics. It will become evident that the thought of the **21.253** fact underlying them accords with the concept developed here, but that their originators failed to establish them as concept and in applying them had again to employ expedients that go against their better thought.

This thought could not be more correctly determined than as Newton stated it. I remove here those determinations which belong to the figurative representation of movement and velocity (from which especially Newton derived the name of *fluxions*) because in them the thought does not appear in its due abstract form but appears concrete, mixed with non-essential forms. Newton explains (*Princ. Mathem. Phil. Nat.*, L. 1, Lemma XI, Schol.)[84] that by fluxions he understands not *indivisibles* (a form of which earlier mathematicians, Cavalieri[85] and others, availed themselves and which contains the concept of a quantum which is *determined in itself*) but *vanishing divisibles*; also, not sums and ratios of determined parts but the *limits* (*limites*) of *sums* and *ratios*. It may be objected that vanishing magnitudes do not have a *final ratio*, because any ratio before the magnitudes vanish cannot be the last, and, once vanished, there is no ratio any more. But by the ratio of vanishing magnitudes is to be understood not their ratio *before* or *after* they vanish, but the ratio *with which* they vanish (*quacum evanescunt*). Likewise, the *first* ratio of incipient magnitudes is the one *with which* they become.

The scientific method of the day only required that one define what one means by an expression. But that by an expression one understands this or that is, properly speaking, a subjective disposition or also a historical demand which in no way indicates that such a concept is necessary in and for itself and has internal truth. Nevertheless, what we have just cited indicates that the concept advanced by Newton corresponds to our exposition of the infinite quantity above,[86] to the way it resulted from the reflection of quantum into itself. Magnitudes are understood in their vanishing, that is, as such magnitudes which are no longer quanta; also, not ratios of determinate parts, but the *limits of the ratio*. The quanta taken

[84] See Newton, *Philosophiae naturalis principia mathematica*, Book 1, Section 1, lemma XI, scholium. In this reference, there is no mention of fluxions, but Newton does make the claim that Hegel refers to, i.e., that he is working not with indivisibles but with vanishing divisibles. The "not sums and ratios of determined parts but the limits of sums and ratios" is taken almost word for word from this scholium.

[85] Francesco Bonaventura Cavalieri (1598–1647), Jesuit and professor of mathematics at the University of Bologna. Among his many works, the *Geometria indivisibilium continuorum nova quadam ratione promota* (1635) anticipates basic ideas of integral calculus.

[86] Cf. above, 21.234–236.

for themselves, the sides of the ratio, as well as the ratio itself in so far as it would be a quantum, are supposed to have vanished; the limit of the quantitative ratio is where the ratio is and is not; more precisely, where the quantum has vanished and, consequently, the ratio is preserved only as a qualitative ratio of quantity, and its sides, too, only as qualitative
21.254 moments of quantity. – Newton adds that from the fact that there are final ratios of vanishing magnitudes, it is not to be concluded that there are final magnitudes, *indivisibles*. For this would be again a leap from the abstract ratio to such sides of it as would have a value for themselves outside their connection in the ratio, as indivisibles, each something which would be a one, devoid of any relation.

To ward off such a misunderstanding, he further reminds us that the *final ratios* are not the ratios of *final magnitudes*, but are limits to which the *ratios* of the limitlessly decreasing magnitudes come closer than any *given*, that is, finite, difference without however overstepping them, for then they would be nullities. – As we said, by *final magnitudes* one could have understood indivisibles or ones. But the definition of the last ratio excludes both the representation of "ones" that are indifferent and devoid of relation and of the finite quantum. However, if the required determination had been brought to the concept of a quantitative determination which is purely a moment of the ratio, there would have been no need either for the *limitless decreasing* into which Newton converts the quantum and which only expresses the progress to infinity, or of the determination of divisibility which no longer has any immediate meaning here.

As regards the *preservation* of the *ratio* in the *vanishing of the quanta*, it has been said (in other places, as in Carnot, *Réflexions sur la Métaphysique du Calcul Infinitésimal*)[87] that, *because of the law of continuity*, the vanishing magnitudes still retain the ratio from which they derive, before they disappear. – This way of representing the matter *expresses* its true nature, provided that the continuity of the quantum is not understood to mean the continuity which it has in the infinite progress where the quantum continues in its vanishing, in such a way that in its *beyond* only a finite quantum arises again, a *fresh term of the series*: but the picture we have of a *continuous* progress is always just that, of values traversed which are still finite quanta. On the other hand, when the transition is made to the true infinite, what is *continuous* is the ratio; and this ratio is so *continuous* and persistent that the

[87] Lazare Carnot (1753–1823), French engineer, mathematician, military man, and politician who pioneered the development of calculus. His *Réflexions sur la métaphysique du calcul infinitésimal* was published in 1797. The place very likely alluded to by Hegel is §43.

transition consists rather in just bringing it out in its purity, thus causing any non-relational determination (that is, any quantum which is a side of the ratio yet remains a quantum also when posited outside it) to vanish. – This purification of the quantitative ratio is thus not unlike the grasping of an empirical *existence conceptually*. The empirical existence is thereby raised above itself, so that its concept contains *the same determinations* as it does, but grasped in their essentiality and *in the unity of the concept* where they have shed their indifferent, conceptually void presence. **21.255**

Equally interesting is the other form of Newton's exposition of the magnitudes under discussion, namely, as *generative magnitudes* or *principles*.[88] A *generated magnitude* (*genita*) is a product such as a quotient, root, rectangle, square, or also the sides of rectangles or squares – quite in general, a *finite magnitude*. "Considered in ceaseless motion and flux as either increasing or decreasing, he classifies the *momentary increments* or *decrements* of such a magnitude under the name of *moments*. These are not to be taken, however, for particles of determinate magnitudes (*particulæ finitæ*). Such particles are not themselves *moments* but magnitudes *generated* from moments. They are to be understood, rather, as the incipient *principles* or *beginnings* of finite magnitudes."[89] – Here the quantum is distinguished from itself: as a product or an existent, and as it is in its *becoming*, in its *beginning* and in *principle*, that is to say, as it is in its *concept*, or again (what here amounts to the same thing), in its qualitative determination. In the latter meaning, the quantitative differences, the infinite increments or decrements, are only moments – are only the end product, when the becoming no longer is, has passed over into the indifference of existence and into externality, and this is a quantum. – Now, although the philosophy of the true concept must acknowledge these determinations of the infinite adduced with respect to increments and decrements, it must nevertheless be noted that the forms themselves of these increments and decrements fall *within* the category of the immediate quantum and of the continuous progress associated with them, and that the representations of such *increments*, of the *growth*, the increase of x by dx or i, and so on, are rather to be regarded as the fundamental evil in these methods – the permanent obstacle to extracting the determination of the qualitative moment of quantity from the representation of the ordinary quantum. **21.256**

Compared with the determinations just given, the *representation* of *infinitesimals* also implied in "increment" and "decrement" leaves much

[88] See Newton, *Principia mathematica*, Book 2, Section 2, lemma 2.
[89] Hegel is not citing but simply reporting what Newton says. See note 88.

to be desired. According to this way of figuratively representing them, their nature is such that they may be *ignored* in comparison with finite magnitudes, and not only they but also their higher orders as compared with the lower, and even the products of several in comparison to a single one. – With Leibniz especially great stress is given to this demand to *ignore* the infinitesimals to which the previous discoverers of methods for dealing with such magnitudes equally left themselves exposed. It is this demand especially which has given calculus, together with a gain in facility, the semblance of inexactitude and deliberate incorrectness in its operations. – Wolff has tried to explain it in his customary way of popularizing things – in effect, by polluting the concept and replacing it with false sense-representations. What he does is to compare ignoring the infinitesimals of higher orders as against the lower with the procedure of a surveyor who, in measuring a mountain, is not any less accurate just because the wind has in the meanwhile blown a speck of sand off from the top; or with ignoring the height of houses or towers in the calculations of lunar eclipses (*Element. Mathes. Univ.*, Tom I. El. Analys. Math., P. II. C. I. s. Schol.).[90]

Even if common sense condescends to such inexactitude, geometricians have on the contrary all rejected this way of representing things. It goes without saying that in the science of mathematics there cannot be any question of empirical exactitude. Mathematical measuring by the operations of calculus or by the constructions and proofs of geometry is totally different from land-surveying, the measuring of empirical lines, figures, and so on. Besides, as already pointed out,[91] the analysts show by the comparison of a result obtained with strict geometrical procedure and with the method of infinite differences that the result is one and the same in both cases; that there is absolutely no place for a more or less in exactitude. And it is self-evident that an absolutely exact result cannot come out of an inexact procedure. Yet, despite all the protesting against the cited attempts
21.257 at justifying this ignoring of infinitesimals in calculus, the fact is that the *procedure* itself of calculus cannot avoid it. And this is the difficulty towards which the efforts of the analysts are directed: to comprehend where the contradiction lies and to remove it.

It is especially relevant in this connection to cite Euler's construal. While adopting the general Newtonian definition, he insists that while

[90] Christian Wolff, *Elementa matheseos universæ* (1742), in *Gesammelte Werke*, *zweite Abteilung*, Vol. 29, edited by J. E. Hofmann (Hildesheim: Georg Olms, 1968), pp. 545–6. English trans., *A Treatise of Algebra, with an Application of it to a Variety of Problems in Arithmetic, to Trigonometry, and Conic Sections. Three Preliminary Treatises*, trans. from the Latin by John Hanna (London, 1739).

[91] Cf. above, 21.238.

differential calculus should consider the *ratios of the increments* of a magnitude, the *infinite differentiation* is however to be considered, as such, as wholly *nil* (*Institut. Calc. Different*. Part I. C. III).[92] – How this is to be understood transpires from the foregoing. The infinite difference is a nil only of quantum, not a qualitative nil; rather, as the nil of quantum it is a pure moment of the ratio alone. It is not the difference *of a magnitude*. But, for that reason, on the one hand it is in principle inappropriate to speak of those moments which are called infinitesimals also as increments and decrements, and as *differences*. This definition implies that something is *added to*, or is *subtracted from*, the initially given finite magnitude; that a subtraction or an addition, an *external arithmetical* operation, takes place. But the transition of the function of the variable magnitude into its differential is to be looked at as of a wholly different nature; that is to say, as already discussed, it is to be considered as the reduction of the finite function to the qualitative ratio of its quantitative determinations. – On the other hand, the inappropriateness betrays itself the moment it is said that the increments are by themselves nil, that only their ratios are being considered, for a nil no longer has any determinateness at all. This exposition thus goes as far as the negative of the quantum, giving to it definite expression, but fails to grasp this negative at the same time in its positive meaning as qualitative determinations of quantity which, if extracted from the ratio and taken as quanta, would be only zeros. – Lagrange's **21.258** judgment on how to represent *limits* or the *final ratios* (*Théorie de fonct. analyt.*, Introd.)[93] is that, although it is easy enough to represent the ratio between two magnitudes as long as the latter remain finite, as soon as the terms of a ratio simultaneously become zero, the ratio fails to offer to the understanding any clear and distinct concept. – Indeed, the understanding must get past this merely negative side on which the terms of a ratio are quantitatively a zero and grasp them positively as qualitative moments. – But what Euler has to contribute in this matter (in the cited text, §84ff.) – namely, that two so-called infinitesimals which are supposed to be nothing but zeros stand nevertheless in reciprocal relation and, for this reason, other symbols than the zero are used for them – this also can hardly be considered satisfactory. He tries to support his claim by distinguishing between arithmetical and geometrical ratios: in the former, we look for differences;

[92] Leonhard Euler (1707–1783), Swiss mathematician who contributed to calculus and topology and was responsible for much of modern mathematical terminology and notation.

[93] Joseph-Louis Lagrange (Giuseppe Lodovico Lagrangia, 1736–1812), Italian mathematician and astronomer who succeeded Euler at Berlin and was then professor at the École polytechnique in Paris. He made important contributions to analysis and number theory.

in the latter, for quotients; although the arithmetical ratio between two zeros is an equality, such is not the case for the geometrical ratio. Thus, if 2 : 1 = 0 : 0, then, because of the nature of a proportion, since the first term is twice as great as the second, also the third is double the fourth; in keeping with the proportion, 0 : 0 should therefore be taken as the ratio of 2 : 1. – Even in common arithmetic, if $n \cdot 0 = 0$; then, $n : 1 = 0 : 0$. – But, just because 2 : 1 or n : 1 is a relation of quanta, there cannot be a ratio, or an expression, of 0 : 0 corresponding to it.

I refrain from multiplying citations since the ones examined are enough to show that the true concept of the infinite is indeed implied in them, but that it has not been accurately brought to view and recognized. As a result, as one proceeds to the operations of calculus, there is no chance that the true conceptual determination would gain control, and what happens is rather that the finite determinateness of quantity makes a return and the operation cannot do without the figure of a quantum which is merely *relatively small*. Calculus necessitates subjecting the so-called infinitesimals to the ordinary arithmetical operations of addition and so on, which are based on the nature of finite magnitudes; it therefore necessitates letting them momentarily have the value of finite magnitudes and treating them as such. It is for calculus to justify why, on the one hand, it brings those infinitesimals
21.259 down to this sphere, treating them as increments or differences, but then, on the other hand, ignores them as quanta after it has just applied to them the forms and the laws of finite magnitudes.

I shall now review the most salient points in the attempts by the geometricians to sidestep these difficulties.

The older analysts had few scruples in the matter, but the moderns have directed their efforts especially towards bringing infinitesimal calculus back to the evidence of a *strictly geometrical method* and towards attaining in it the *rigor of the proofs of the ancients* (Lagrange's expression)[94] in mathematics. But since its principle is of a higher nature than the principle of mathematics, infinitesimal analysis quickly had to dispense with that *kind of evidence*, just like philosophy which can make no claim to the clarity which is the prerogative of the sciences of sensible things, e.g. natural history, and like eating and drinking which are reckoned a business more easily understood than thinking and conceptualizing. Accordingly, we shall deal only with the efforts to attain the rigor of proof of the ancients.

[94] Lagrange: See Joseph Louis Lagrange, *Théorie des fonctions analytiques, contenant les principes du Calcul différentiel, dégagés de toute considération d'infiniment petits, d'évanouissans, de limites et de fluxions, et réduits à l'analyse algébrique des quantités finies*, 3rd edn (Paris, 1847), p. 6.

Several authors have tried to dispense altogether with the concept of the infinite, and without it to achieve the same results as seemed to be bound up with its use. – Lagrange, for instance, refers to the method that Landen[95] discovered, saying of it that it is purely analytical; it does not use infinitesimal differences but begins by introducing *different values* of variable magnitudes which he then *equates* in what follows. Lagrange's opinion, incidentally, is that in this method the single advantage of differential calculus, simplicity of method and ease of operation, is lost. – This is, indeed, a procedure that bears some similarities to the tangential method which was Descartes's starting point – about which, more later on.[96] Here we can note that this much is in general immediately evident: that assuming different values of variable magnitudes and then equating them belongs to another order of mathematical operation than does the method of differential calculus; and that the peculiar nature of the simple relation yet to be more closely discussed to which the actual, concrete **21.260** determination of this calculus reduces, namely the relation of the derived function to the original, is not brought to view.

The earlier of the moderns, for instance Fermat, Barrow, and others,[97] who were the first to make use of infinitesimals in the application which was later developed into differential and integral calculus, and then Leibniz also and his followers, and Euler as well, have always openly believed that they were entitled to omit the products of infinitesimal differences, as well as their higher powers, simply on the ground that they *vanish relative* to the lower order. This alone is the ground on which they rest *the fundamental principle*, namely the determination of that which is the differential of a product or of a power, *for the whole theoretical teaching reduces to this*. The rest is partly mechanism of development, partly application, in which however, as we shall have to see later, the higher or rather the whole interest in fact lies.[98] – For the point now at issue we only need to cite here what is elementary, that the first principle concerning curves is assumed on the same ground of *insignificance*, namely the principle that the elements of curves, the *increments* of the abscissa and the ordinate, are *related* to each other as *subtangent* and ordinate; that for the purpose of obtaining

[95] John Landen (1719–1790), English mathematician. Cf. Lagrange, *Théorie des fonctions analytiques*, p. 4.

[96] Cf. below, 21.287–288.

[97] Pierre de Fermat (1601–1665), French lawyer and mathematician. Isaac Barrow (1630–1677), English classical scholar, theologian, and mathematician. He was the teacher of Isaac Newton. According to the critical editors, Hegel derives his information from Carnot's *Réflexions sur la métaphysique du calcul infinitésimal* (1797).

[98] Cf. below, 21.273–299.

similar triangles, the arc that forms the third side of a triangle to the two increments of the triangle (once rightly called *characteristic*) is regarded as a straight line, as part of the tangent and therefore as the one increment which reaches the tangent. On the one hand, such assumptions raise those determinations above the nature of finite magnitude; on the other hand, a method which is only valid for finite magnitudes, and which allows no room for ignoring anything on the ground of insignificance, is being applied to moments now called infinitesimal. With such a procedure, the difficulty with which the method is burdened remains in all its starkness.

We must cite here a remarkable procedure of Newton (*Princ. Math. Phil. Natu*. Lib. II, Lemma II, Propos. VII)[99] – the invention of an ingenious device for circumventing the arithmetical incorrect omission of the
21.261 products of infinite differences or of their higher orders in finding the differentials. This is how he finds the differential of the product, from which the differentials of the quotients, the powers, and so on, can easily be derived. The product of *x* and *y*, when each is taken as decreased by *half* of its infinitesimal difference, becomes:

$$xy - \frac{xdy}{2} - \frac{ydx}{2} + \frac{dxdy}{4}$$

But if *x* and *y* are made to increase by an equal amount, it becomes:

$$xy + \frac{xdy}{2} + \frac{ydx}{2} + \frac{dxdy}{4}$$

Now, subtract the first product from the second, and the remainder is $ydx + xdy$, a remainder that is the *surplus of the increase by a whole dx* and *dy*, for this increase is the difference between the two products; it is, therefore, the differential of *xy*. – Clearly, in this operation the term which is the cause of the main difficulty, the product of the two infinitesimal differences, *dxdy*, cancels itself out. However, despite the name of Newton, it must be said that such an operation, although very elementary, is incorrect. It is not true that:

$$\left(x + \frac{dx}{2}\right)\left(y + \frac{dy}{2}\right) - \left(x - \frac{dx}{2}\right)\left(y - \frac{dy}{2}\right) = (x + dx)(y + dy) - xy$$

[99] See Newton, *Principia mathematica*, Book 2, Section 2, lemma 2.

Only the need to give a foundation to the fluxional calculus, given its importance, could have brought Newton to deceive himself about such a proof.

Other forms which Newton employed in the derivation of differentials are bound up with concrete meanings, all referring to movement, of the elements and their powers. – In connection with the use of the *serial form* which is of course the signature of his method, it is all too tempting to say that it is always in someone's power to assume as *exact* a magnitude *as one needs* by the addition of further terms, and that the omitted terms are *relatively insignificant*, the result being quite in general only an *approximation*; it is all too tempting in order not to believe that here also Newton would have been satisfied with the same justification for omitting the higher powers which, by his method of solving equations of higher degree by approximation, arise in the given equations from the substitution of any established but still inexact value – namely, on the crude ground that they are small. See Lagrange, *Equations Numériques*, p. 125.[100]

The *error* into which Newton fell in solving a problem by the omission of essential higher powers, an error which gave his opponents the occasion for a triumph of their method over his, and of which Lagrange has traced **21.262**
the true origin in his recent investigations (*Théorie des fonct. Analyt.*, 3rd P., Ch. IV),[101] is indicative of the *formalism* and the *uncertainty* which still prevailed in the use of that instrument. Lagrange shows that Newton fell into his error because he ignored the term of the series containing the power on which the specific task depended. Newton had kept to the formal, superficial principle of omitting terms because of their relative smallness.– For example, it is well known that in mechanics a *determinate meaning* is assigned to the terms of the series in which the function of a movement is developed, so that the first term or the first function refers to the moment of velocity, the second to the accelerating force, and the third to the resistance of forces. Here, then, the terms of the series are not to be seen as *parts* of a sum, but as *qualitative moments of a conceptual whole*. In this way, the *omission* of the remaining terms acquires a completely *different meaning* than their omission on the ground of their *relative*

[100] See Joseph Louis Lagrange, *Traité de la résolution des équations numériques de tous les degrés, avec des notes sur plusieurs points de la théorie des équations algébriques*, 3rd edn (Paris, 1826), note 5, §1.
[101] Lagrange, *Théorie des fonctions analytiques*, Part 3, Chapter 4.

21.263 *smallness*.[k] The error in Newton's solution was in ignoring, *not* the terms of the series only as *parts of a sum*, but the *term containing the qualitative determination* on which all depends.

In this example, the procedure is made to depend on the qualitative *meaning*. In this connection the general assertion can at once be made that the whole difficulty of the principle would be set aside if, instead of the formalism of defining the differential simply by the problem that gives its *name* to it (the problem, that is, of the *difference* in general between a function and its *variation* after its variable magnitudes have received an *increment*), the *qualitative* meaning of this principle were stated and the operation were made to depend on it. In this sense the differential of x^n is demonstratively wholly exhausted by the first term of the series which results from the expansion of $(x + dx)^n$. So, that the rest of the terms are ignored is not on account of their relative smallness; there is no supposition
21.264 here of an inexactitude, of a fault or error which would be *compensated for*

[k] Both views are found simply side by side in the application by Lagrange of the theory of the function to mechanics in the chapter on rectilinear motion (*Théorie des fonct.* 3rd P. Ch. I, art 4).[102] The traversed space, considered as the function of the elapsed time, gives the equation $x = ft$; this equation, expanded as $f(t + \varphi)$, gives:

$$ft + \varphi f't + \frac{\varphi^2}{2} f''t + \text{and so on.}$$

Therefore, the space traversed in the elapsed time is represented in the formula:

$$= \varphi f't + \frac{\varphi^2}{2} f''t + \frac{\varphi^3}{2 \cdot 3} f'''t + \text{and so on}$$

The motion by means of which the space is traversed is (it is said) *therefore* – i.e. because the analytical development yields several, in fact infinitely many terms – *composed* of various partial motions, of which the spaces corresponding to the time will be:

$$\varphi f't, \frac{\varphi^2}{2} f''t, \frac{\varphi^3}{2 \cdot 3} f'''t, \text{and so on.}$$

The first partial motion is, in known motion, the formally uniform motion with a velocity determined by $f't$; the second, the uniformly accelerated velocity derived from an accelerated force which is proportional to $f''t$. "Now since the remaining terms *do not refer to any known simple motion*, it is not *necessary* to *take* them particularly *into consideration*, and we shall show that it is possible to *abstract from them* in determining the motion at the beginning of the point in time." This is now shown, but, of course, only by *equating* the series whose terms were *all* part of the determination of the *magnitude of the space traversed* in that time with the equation, given in *art.* 3, of the motion of a falling body, $x = at + bt^2$, in which only these two terms are present. But this equation has itself received the form that it has by presupposing the *explanation given* for the resulting terms by means of *analysis*; this presupposition is that the uniformly accelerating motion is *composed* of a formally uniform motion continued with the velocity attained in the preceding period of time, and of an increment (the a in $s = at^2$, i.e. the empirical coefficient) which is ascribed to the force of gravity – a distinction which has absolutely no concrete existence or foundation in the nature of the matter itself, but is only the expression, in false physical form, of the results of the assumed analytical treatment.

[102] See Lagrange, *Théorie des fonctions analytiques*, Part 3, Chapter 1, §4.

and *corrected* by another error – a view on which Carnot especially relies for justifying the ordinary method of the infinitesimal calculus.[103] Since at issue here is a *relation* and not a *sum*, the differential is completely given *by the first term*; and where there is the need of further terms, of differentials of higher orders, their determination does not involve the continuation of a series as *sum*, but the *repetition* rather of one and the same *relation*, the only one wanted and the one which is, therefore, already *completely* determined in the *first term*. The need for the *form* of a *series*, its summation and all that goes with it, must then be totally separated from this *interest of the relation*.

The explanations which Carnot offers concerning the method of infinitesimal magnitudes contain the most limpid and most clearly expounded exposition of the upshot of the preceding reflections. However, when the transition is made to the actual operations of calculus, the usual representations about the infinite *smallness* of the omitted terms *with respect to* the others more or less creep in again.[104] Carnot justifies the method rather because, as a matter of fact, its *results* are the correct ones, and because of the *benefits* which the introduction of *incomplete* equations (as he calls them, that is, those in which this arithmetically incorrect omission has taken place) brings to the simplification and the abbreviating of calculus.

Lagrange has famously taken up Newton's original method again, that of the series, in an effort to rise above the difficulties inherent in the representation of the infinitely small, as well as in the method of the first and final ratios and limits. Of his functional calculus, of which the other advantages in the matter of precision, abstraction and generality, are sufficiently known, this much alone need be said for present purposes, namely that he rests his case on the fundamental principle that the difference, without becoming zero, *can be taken to be so small that each term of the series exceeds in magnitude the sum of the following terms*.[105] – In this method, too, the start is made from the categories of *increment* and from the *difference* of the function, the variable magnitude of which receives the *increment* (whence the troublesome series) from the original function. Also in the **21.265** sequel, the terms of the series to be omitted come in for consideration only as constituting a *sum*, and the reason for omitting them is assumed in the relativity of their *quantum*. Here too, therefore, on the one hand the omission is not brought back to the standpoint which prevails in some of

[103] See Lazare Carnot, *Réflexions sur la métaphysique du calcul infinitésimal* (Paris, 1797), §§9ff.
[104] See Carnot, *Réflexions*, §§30f.
[105] See Lagrange, *Théorie des fonctions analytiques*, Part 1, Chapter 1, §6.

the applications where (as was noted above)[106] the terms of the series are supposed to have a determinate *qualitative meaning*, and terms are disregarded, not because they are insignificant in magnitude, but because they are qualitatively insignificant; on the other hand, the omission itself ceases to have any place in the essential standpoint which, as regards the so-called differential coefficient, acquires a specifically prominent position only with Lagrange, in the so-called *application* of the calculus – a point which will be discussed in detail in the following Remark.

The *general qualitative character* of the form of magnitude here under discussion, as demonstrated in what in that form is called the infinitesimal, is most immediately found in the category of *limit of the ratio* referred to above[107] and, when carried out in calculus, has received the stamp of a method of its own. Of Lagrange's two criticisms of this method – that it lacks ease of application, and that the expression *limit* carries no determinate idea – we shall take up only the second here, in order to examine more closely what is being said about its analytical meaning. Now the conception of limit does indeed imply the stated true category of the *qualitatively* determined relation of variable magnitudes, for the forms of it which occur, dx and dy, are supposed to be taken simply as only moments of $\frac{dy}{dx}$, and $\frac{dx}{dy}$ itself ought to be regarded as one single indivisible symbol. That the mechanism of calculus thereby loses, particularly in its application, the advantage derived from the sides of the differential coefficient being separated from each other, this we shall disregard here. Now the limit in question should be the *limit* of a given function; it assigns a certain value with reference to this function as determined by the manner of derivation. However, the mere category of limit takes us no further than we have gone in this Remark, namely to show that the infinitely small which in the differential calculus occurs as *dx* and *dy* does not have the merely negative, empty meaning of a non-finite, non-given magnitude (as when one speaks of an "infinite multitude," of an "*ad infinitum*," and the
21.266 like), but has the specific meaning of a qualitative determinateness of the quantitative,[108] of a relational moment[109] as such. But the category still has no relation to that which is a given function, is not itself involved in the treatment of it or in any use that might be made in it of that determination; so, also the conception of limit, held to its demonstrated meaning, leads nowhere. Nevertheless, the very expression "limit" entails that it is the limit *of something*, that is, that it expresses a certain value which lies in

[106] Cf. above, 21.262. [107] Cf. above, 21.253.
[108] *qualitative Bestimmheit des Quantitativen*. [109] *Verhältnißmoment*.

the function of a variable magnitude; and we must see how it behaves in this concrete role. – It is supposed to be the limit of the *ratio* between the two *increments* by which the two variable magnitudes connected in an equation (one of which is regarded as a function of the other) are assumed to *increase*; the increment is taken here as undetermined, in general, and to this extent no use is made of the infinitely small. But the procedure by which this limit is found carries with it the same inconsistencies as in the other methods. The procedure is as follows: if $y = fx$, then, when y becomes $y + k$, fx is supposed to change into $fx + ph + qh^2 + rh^3$ and so on; thus $k = ph + qh^2$ and so on, and $\frac{k}{h} = p + qh + rh^2$ and so on. Now if k and h vanish, so vanishes also the other side of the equation, with the exception of p which would now be the limit of the ratio of the two increments. One can see that although h, as quantum, is posited $= 0$, $\frac{k}{h}$ is not for that reason taken at the same time to be $\frac{0}{0}$ but is rather still supposed to remain a ratio. Now the advantage that the conception of *limit* supposedly affords is that it circumvents the inconsistency entailed here; for p is, at the same time, supposed to be not the actual ratio (which would be $\frac{0}{0}$) but only that determinate value which the ratio can *infinitely approximate*, that is, can get so near to it that *the difference would be smaller than any that might be given*. The exact meaning of *approximation*, as regards that which is supposed to be in reciprocal approximation, will be considered later.[110] – However, that a quantitative difference which, by definition, not only *can be*, but *ought to be*, smaller than any given, is no longer quantitative; this is self-evident, as evident as anything can be in mathematics; but then we have gone past $\frac{dy}{dx} = \frac{0}{0}$. If, to the contrary, $\frac{dy}{dx} = p$, that is, it is assumed as a determinate quantitative ratio as it is in fact, then, conversely, the presupposition that $h = 0$ is compromised, and this is a presupposition on the basis of which alone $\frac{k}{h} = p$ is found. And should it be granted that $\frac{k}{h} = 0$ (in which case, h being $= 0$, k is also in fact $= 0$ by entailment, for the increment from k to y occurs only on condition **21.267**
that there is an increment h), the question then to be asked is what p, which is definitely a determinate quantitative value, might possibly be. To this there is at once an obvious answer, simple and to the point, namely that p is a coefficient and that it is the product of some derivation or other – the first function, derived in some determinate way, of an original function. If one is satisfied with this, as Lagrange *in effect* was, then the general part of the science of differential calculus, and immediately this form of it that

[110] Cf. below, 21.268–269.

goes under the name of *theory of limits*, would be rid of the increments, rid also of their infinite or arbitrary smallness, and of the difficulty of again doing away with the rest of the terms of a series other than the first, or rather other than just the coefficient of the first, terms which inevitably present themselves upon the introduction of those increments; purged, in addition, also of all that goes with them, of the formal categories, above all of that of the infinite, of the infinite approximation, and likewise of the here still empty categories of continuous magnitude[1] which, like *striving*, *becoming*, *occasion of a variation*, are otherwise deemed necessary. But it would then be required to show what *meaning* and *value p* would still have, besides the determination (meager but quite adequate for the theory) that
21.268 it is nothing but a function derived from the expansion of a binomial, that is, to show what *place* and which *use* it has in the context of other mathematical requisites. This will be the subject of Remark 2. – But first, we shall follow up here with an analysis of the confusion brought about by the just documented widespread use of the figurative representation of *approximation* in comprehending the true, qualitative determinateness of the relation which was our original concern.

It has been shown that the so-called infinitesimals express the vanishing of the sides of the ratio as quanta, and that the remainder is their quantitative relation purely determined in qualitative fashion;[112] the qualitative relation does not get lost, far from it; it is rather precisely that which results from the conversion of finite into infinite magnitudes. In this, as we have seen, is where the whole nature of the matter consists. – Thus, what vanishes in the *final ratio* is, e.g., the quanta of the abscissa and the ordinate; but the sides of the ratio essentially remain: the one side, the element of

[1] The category of *continuous* or *fluent* magnitude comes in with the consideration of the *external* and *empirical* variation of the magnitudes which, in an equation, are referred to each other as each the function of the other. But in science, where the object of differential calculus is *a certain relation* (usually expressed by the differential coefficient), and its determinateness may just as well be called a *law*, the mere continuity of magnitude is something alien to this specific determinateness, and in any case an abstract and here empty category, for it says absolutely nothing concerning the law of continuity. – The extreme of formalism into which one can be misled in these matters can be seen from the penetrating general exposition by my respected colleague, Prof. Dirksen, of the fundamental determinations used in the deduction of differential calculus. This exposition is appended to his critique of a number of works concerning this science and can be found in *Jahrb. f. wissensch. Kritik*, 1827, Nr. 153ff. The following definition is cited on p. 1251: "A *continuous* magnitude, a continuum, is any magnitude thought of as in the state of becoming, *so that* this becoming occurs not *by leaps* but by an *uninterrupted progression*."[111] But this is surely a tautology, the same as the *definitum*.

[111] Enno Heeren Dirksen (1788–1851), professor of mathematics at Berlin, *Jahrbücher für wissenschaftliche Kritik*, 153–160 (1827), column 1251.

[112] Cf. above, 21.253.

the ordinate; the other, the element of the abscissa. When we represent one ordinate as *infinitely approximating* another, the previously differentiated ordinate passes over into another ordinate, and the previously differentiated abscissa passes over into another abscissa; but essentially the ordinate does not pass over into the abscissa or the abscissa into the ordinate. The element of the ordinate – to continue with this instance of variable magnitudes – is not in the *difference between one ordinate and another ordinate*, but is rather the *difference* itself, or the *qualitative* determination of the magnitude of the ordinate as against *the element of the abscissa*; *the principle of one variable magnitude as against that of another* is in the relation of the one to the other. The difference, in so far as it no longer is the difference of finite magnitudes, has ceased to be a manifold in itself; it has collapsed into **21.269** simple intensity, into the determinateness of the one qualitative moment of a ratio against the other.

This is how the matter stands, but its nature is obscured because what we have just called the "element" of, for instance, the ordinate, is grasped as *difference* or *increment* in such a way that it is only the difference between the quantum of one ordinate and the quantum of another ordinate. As a result, *limit* does not have here the meaning of ratio; it only stands for the final value to which another magnitude of equal kind can come as close as one will and still be differentiated from it, the final *ratio* being a ratio of *equality*. The infinite difference is thus the fluctuation of a difference between one quantum and another quantum, and in this representation the qualitative nature which makes dx essentially not a ratio determination relative to x, but to dx, is overlooked. dx^2 is made to vanish relative to dx, but even more does dx vanish relative to x, and this means in truth that it has *a relation only to dy*. – In expositions of this kind, it is the geometricians especially whose constant concern is to *conceptualize* the *approximation* of a magnitude to its limit, and who insist on stressing this aspect of the difference of quantum from quantum, that it is not a difference and yet it is. But all the same, approximation is by itself a category that says nothing and conceptualizes nothing; the fact is that dx has already left approximation behind; it is neither "close" nor "closer"; and as for the meaning of "infinitely close," it is the negation of "being close" and "approximation."

Now because the increments or the infinitesimals have thus been viewed only from the standpoint of the quantum that vanishes in them, and only as limits of this quantum, they have also been grasped as *unrelated* moments. From this would follow that it is allowed in the final ratio to posit, say, the abscissa and the ordinate, or also the sine, cosine, tangent, versed

sine, or what have you, as equal to each other: but this is an inadmissible position. – The inadmissibility seems especially to hold when an arc is
21.270 treated like a tangent, for the *arc*, too, is surely *incommensurable* with the *straight line*: its element is, from the start, of another *quality* than the element of the straight line. Squaring the circle, taking a part of the arc, however infinitely small, to be a part of the tangent and thus to treat it as a straight line seems even more absurd and inadmissible than confusing abscissa, ordinate, versed sine, cosine, etc. – However, there is an essential difference between this way of treating the arc and the confusion that we have decried. The procedure here is justified because in the triangle which has as its sides the element of an arc and the element of its abscissa and ordinate, the *relation is the same* as if that element of the arc were the element of a straight line, of the tangent; the *angles* which constitute the *essential relation*, that is, that which remains to these elements when their respective finite magnitudes are abstracted from, are the same. – This can also be expressed by saying that straight lines, when infinitely small, have passed over into curved lines; that their relation in their infinity is a relation of curves. Since the straight line is by definition the *shortest distance* between two points, its difference from the curved line is based on the determination of *amount*, on the *smaller* number of what is differentiable in this distance, a determination, therefore, of a *quantum*. But this determination vanishes in the line when it is taken as an intensive magnitude, as infinite moment, as element, and so does also its difference from the curved line which rested simply on a difference of quantum. – As infinite, therefore, the straight line and the arc no longer retain any quantitative relation and consequently, by virtue of the assumed definition, also no qualitative difference from each other either; on the contrary, the one passes over into the other.

Similar to the equating of heterogeneous determinations, but at the same
21.271 time different from it, is the assumption that *infinitely small parts* of a same whole are *equal* to each other. By itself this assumption is indeterminate and completely indifferent, but when applied to an object which is internally heterogeneous, that is, constrained by an essentially non-uniform quantitative determination, it produces the peculiar reversal contained in that proposition of higher mechanics according to which infinitely small parts of a curve are traversed in *equal* and infinitely small times in uniform motion, where this is said of a motion in which, in equal *finite* (that is, concretely existing) parts of time, *finite* (that is, concretely existing) unequal parts of the curve are traversed – that is, is said of a motion which exists concretely as non-uniform and is assumed to be such. This proposition is the expression in words of what an analytical term – such

as is obtained by the already cited expansion of the formula of a motion which is non-uniform but otherwise conforms to law[113] – is supposed to mean. Earlier mathematicians sought to express the results of the newly invented infinitesimal calculus (which, after all, always had to do with concrete objects) in words and propositions, and to exhibit them in concrete geometrical constructions, basically to use them as theorems in the ordinary method of proof. The terms of the mathematical formula into which analysis transposed the *magnitudes* of the object, of motion for instance, were invested there with an *objective* meaning, such as of velocity, force of acceleration, etc., and in virtue of this meaning the terms were supposed to yield correct propositions, physical laws, and also, in conformity with the analytical connectedness, their objective links and relations. For instance, the specific velocity that obtains in a uniformly accelerating motion is proportional to the times, but in addition there is always an increment that accrues to the velocity from the force of gravity. In the modern analytical form of mechanics, such propositions are advanced simply as the results of calculus, without worrying whether they have by themselves, within them, a *real* sense, that is, one that would correspond to concrete existence, and without bothering with a proof for it. The difficulty of conceptualizing the link between such determinations when taken in this real sense just mentioned, as for instance the transition from absolutely uniform velocity to uniformly accelerated velocity, is deemed to be completely circumvented by the analytical treatment in which the link is a simple result of the authority henceforth reigning of the operations of calculus. It is now declared a triumph of science that merely by means of calculus, it can discover laws that *transcend experience*, that is, propositions regarding concrete existence which have no existence. But in the earlier, still naïve time of infinitesimal calculus, the aim was to give to such determinations and propositions as **21.272** were represented in geometrical figures a real sense of their own, to make them plausible and to apply them in this sense to the proof of the main propositions concerned. (See Newton's proof of his fundamental propositions of the theory of gravitation in *Princ. mathem. naturalis*, lib. I. Sec. II. Prop. I, compared with Schubert's *Astronomy*, 1st edn, Book III, §20, where it is admitted that things are not *exactly* as Newton assumed them – that is, at the very point which is the nerve of the proof.)[114]

[113] Cf. above, 21.262–263, footnote.

[114] Hegel's reference to Newton is from *Principia mathematica*, Book 1, Section 2, Proposition 1. His second reference is to Friedrich Theodor Schubert (1758–1825), *Theoretische Astronomie*, Vol. 3, *Physische Astronomie* (St. Petersburg, 1798).

It cannot be denied that, especially with the aid of the fog of the infinitely small, much has been accepted as proof in this field for no other reason except that the result had already always been known to be true and the proof, deliberately devised to reach that result, created at least *the illusion of a scaffolding of proof* – an illusion which was still preferred to mere belief or to knowledge from experience. I personally make no scruples about regarding this affectation as nothing more than sleight of hand and logical charlatanism, and I extend this judgment to Newton's proofs as well, those especially which fall within the purview of the present discussion and for which Newton has been extolled to the skies above Kepler, because he has established mathematically what the latter had discovered *by experience alone*.

The empty scaffolding of such proofs was erected in order to prove physical laws. But mathematics is in principle incapable of demonstrating the quantitative determinations of physics, for these determinations are laws based on the *qualitative nature* of its elements; it cannot, for the simple reason that this science is not philosophy, does not proceed *from the concept*, and therefore anything qualitative which cannot be derived lemmatically from experience falls outside its sphere. It is for mathematics a point of *honor* that all its propositions ought to be *rigorously proved*, and this made it forget its limits; it seemed an offense to this honor that experience would be acknowledged as alone the source and sole proof of
21.273 *propositions of experience*. Consciousness has gained in sophistication since then, but as long as it is not clear about the distinction between what can be proved mathematically and what can only be taken from elsewhere, between the mere terms of an analytical expansion and things that exist physically, scientific culture will lack rigor and purity. – Undoubtedly, this scaffolding of Newtonian proof will be subject to the same justice as was Newton's other baseless artifact, his construct of *optical experiments* and the *conclusions* bound to them. Applied mathematics is still full of a like brew of experience and reflection; but just as part after part of Newtonian optics has already for some time begun to be ignored by science *as a matter of fact* (though the rest is inconsistently allowed to stand despite the consequent contradiction), so it is also a *fact* that a part of those pseudo-proofs has already naturally fallen into oblivion or have been replaced by others.

Remark 2

The purpose of differential calculus deduced from its application

In the previous Remark, we considered the conceptual nature of the *infinitesimal* which is used in differential calculus as well as the reason

for introducing it in that calculus; both are abstract determinations and therefore also intrinsically easy. Its so-called *application*, however, presents more serious difficulties, but also the more interesting side. The elements of this side will be the subject of the present Remark. – The whole method of the differential calculus is covered by the proposition, $dx^n = nx^{n-1}dx$, or $\frac{f(x+i)-fx}{i} = P$, that is, is equal to the *coefficient* of the first term of the binomial $x + d, x + i$, raised to the power of dx or i. There is no need to learn anything further; the derivation of the subsequent forms, of the differential of a product, of an exponential magnitude, and so forth, follows mechanically; in a short time, half an hour or so, one can be in possession **21.274** of the whole theory, and with the finding of the differential, the converse or the finding from the differential of the original function is equally given. What takes longer is the endeavor to see, to grasp conceptually, how it is that, after easily managing analytically, that is, purely arithmetically, one *condition* of the task, namely *the finding of the said coefficient* by the expansion of the function of the variable after the latter has received the form of a binomial by the addition of an increment – how, after this part of the task, the *other condition*, namely the omission of the remaining terms of the series except the first, can also be correct. If the coefficient alone were all that is necessary, then, once this is determined, all that concerns the theory would be taken care of in less than half an hour, as we said; the omission of the further terms of the series would present no difficulty – far from it, for such terms, as terms of the series (their determination as second, third, etc., function is already absolved with the determination of the first), would not come into question at all since they are of no relevance.

We may begin by remarking that the method of differential calculus has all the markings of not having been invented and developed for its own sake. Not only is it not grounded for itself as any other form of analysis; what is more is that the arbitrary direct omission of terms that have resulted from the development of a function, despite the fact that this *whole* development is taken to belong *fully* to the matter at hand – which is considered to be the *difference* between the developed function of a variable, after this has been given the form of a binomial, and the original function – that this omission totally contradicts every mathematical principle. The need to proceed in this way, as well as the lack of internal justification for the procedure, immediately suggest that the origin and foundation must lie elsewhere. It happens also in other sciences that what is presumed at the start to be the primitive element from which the propositions of a science will have to be derived, is in fact not self-evident but proves rather to have its cause and justification in what follows. The course of events in

the history of the differential calculus makes it clear that it originated in the various so-called tangential methods, its *subject matter in ingenious devices* as it were; it was only later, when its method was extended to other subject matters, that the nature of this method came in for conscious reflection and formalization, and the attempt was made to raise its abstract formulas
21.275 to *principles*.

We have shown that the conceptual determinateness of the so-called *infinitesimal* is the qualitative determinateness of the quantity of such quanta as are first posited in relation to each other. Attached to this there came the empirical undertaking of discovering this conceptual determinateness in such descriptions or definitions of the infinitesimal as are found of it when taken as an infinitely small difference or the like. – This was done in the interest of abstract conceptual determinateness as such. The next question would be about the nature of the transition to mathematical formulation and application. To this end we must first examine the theoretical side further, the conceptual determinateness, and this is a task which will prove to be not altogether unfruitful even by itself; we must then consider the relation of this theoretical side to its application, and show in the case of both, inasmuch as it is relevant here, that the general conclusions are adequate to both the purpose of differential calculus and the method by which it realizes it.

First, we must remember that the specifically mathematical form of the concept now at issue has already been given in passing. The qualitative determinateness of quantity is first exhibited in the quantitative *relation* as such; however, already in the demonstration of the various so-called kinds of reckoning (see the relevant Remark),[115] it was anticipated that it would be in the *relation of powers* (still to be considered in its proper place)[116] that number, by the equating of the moments of its concept (unity and amount), is posited as having turned back into itself, and that, as such, it would receive the element of infinity, of being-for-itself, that is, of being determined through itself. Thus, as already indicated, the explicitly qualitative determinateness of magnitude is essentially connected with the determinations of powers, and since differential calculus specifically operates with qualitative forms of magnitudes, the mathematical subject matter that specifically belongs to it must be the treatment of forms of powers; it is also the whole range of problems, together with their solutions, for the sake of which differential calculus is employed, which shows that its interest lies solely in the treatment of determinations of powers as such.

[115] Cf. above, 21.196. [116] Cf. below, 21.318ff.

This is an important opening position. It at once puts in the forefront something determinate instead of the merely formal categories of variable, continuous or infinite magnitudes, or even only of functions in general. Yet it is still too general, for there are other operations that deal equally with powers. The raising to a power, the extraction of a root; also the treatment of exponential magnitudes and logarithms, of series, of equations of higher powers: the interest and the effort of all these operations lie solely in **21.276** relations based on powers. Undoubtedly, together they constitute a system of the treatment of powers; but which of the various relations in which the determinations of powers may be put is the proper subject matter and interest of differential calculus, this is to be ascertained from the differential calculus itself, that is, from its so-called applications. These constitute in fact the core of the matter, the actual procedure in the mathematical solution of a certain group of problems; this procedure came earlier than any theory or general part and was called an application later, only in connection with the then created theory, the intention of which was in part to draw up its general method for the procedure, but in part also to find principles for it, that is, a justification. We have shown in the preceding Remark[117] the futility of searching for principles that would effectively resolve the contradiction patent in the current conceptions of the method of calculus. We have shown this futility instead of excusing it or of hiding it on the pretext that what is necessary for mathematical practice is however out of consideration here, or, what amounts to the same thing, with the possibility of an infinite or arbitrary approximation to the infinite or the like nonsense. These principles and all the fuss made on their behalf, if the general method of this real part of mathematics called differential calculus were abstracted differently than it has been done so far, would turn out to be indeed just as superfluous as they are inherently defective and irrevocably contradictory.

If we investigate what is distinctive about differential calculus by the simple inventory of what there is in this part of mathematics, we find the following as the subject matter:

(α) Equations in which any number of magnitudes (here we need simply confine ourselves to *two*) are combined into one determinate whole in such a way that, *first*, the equations themselves derive their determinateness *from empirical magnitudes* which are their fixed limits, and also from the kind of link which they have with these limits and with each other as is generally the case in an equation; but since there is only one equation for

[117] Cf. above, 21.260–268.

both magnitudes (and relatively more equations for more magnitudes, but always less than the number of the magnitudes), these equations belong to the class of indeterminate equations; and, *second*, one feature of the determinateness of these magnitudes (or of one of them at least) is that these magnitudes occur in the equation with a power *higher* than the first *power*.

A few observations in this regard are in order here. The first is that the magnitudes in the first of the above two headings exclusively have
21.277 the character of such *variables* as occur in the problems of *indeterminate* analysis. Their value is indeterminate, but if a completely determinate value accrues to one of them from elsewhere, that is, a numerical value, then the other also becomes determinate, so that one is a *function* of the other. For the specific magnitudes here at issue, therefore, the categories of variables magnitudes, of functions and the like, are merely formal, as we said earlier,[118] because they are still too general to contain the kind of specificity to which the whole interest of differential calculus is directed, nor can this specificity be developed out of it analytically; they are as such simple, insignificant, easy determinations that are rendered difficult by importing into them that which is not in them, in order then to derive it from them, namely the specific determination of differential calculus. – Then, as regards the so-called *constant*, it should be noted that it is at first an indifferent empirical magnitude determining the variables merely with respect to their empirical quantum, as a limit of their minimum and their maximum; but the nature of the link connecting the constants to the variables is itself one factor defining the particular function which these magnitudes are. But, conversely, the constants themselves are also functions; for instance, inasmuch as a straight line carries the meaning of being the *parameter* of a parable, this, its meaning, is that it is the function $\frac{y^2}{x}$; as in the expansion of a binomial generally, the constant which is the coefficient of the first term of the expansion is the sum of the roots, the coefficient of the second term is the sum of their products in twos, and so on; hence these constants are here in general functions of the roots. Where, in integral calculus, the constant is determined from the given formula, it is to that extent treated as a function of that formula. We shall further consider these coefficients later on, but in another determination than that of functions, their concrete meaning being the real point of interest.[119]

Now the essential difference between variables as considered in differential calculus and as they are in indeterminate problems lies in what has

[118] Cf. above, 21.275. [119] Cf. below, 21.281–282.

just been said, namely that at least one of those magnitudes, or also all of them, is in a power higher than that of one, though it is again a matter of indifference whether they are all of the same higher power or of unequal powers; the indeterminateness specific to them consists solely in this, that *in such a relation of power they are functions of one another*. The alteration **21.278**
of the variables is thus *qualitatively* determined, and consequently *continuous*, and this continuity (itself again only the formal general category of an *identity*) of a determinateness preserved unaltered in the alteration has its determinate meaning here, solely in the power-relation which does not have a quantum for its exponent and constitutes the *non-quantitative*, permanent determinateness of the ratio of the variables. It is therefore also to be noted, this time against another form of formalism, that the first power is a power only in relation to higher powers; by itself, x is just an indeterminate quantum. Thus there is no point in differentiating *for their own sake* the equations $y = ax + b$ (the equation of the straight line), or $s = ct$ (that of absolutely uniform velocity); if from $y + ax$, or also from $y = ax + b$, we obtain $a = \frac{dy}{dx}$, or $\frac{ds}{dt} = c$ from $s = ct$, then $a = \frac{y}{x}$ is equally the determination of the tangent, or $\frac{s}{t} = c$ the determination of simple velocity. This last is expounded as $\frac{dy}{dx}$ in *the context* of what is said to be the expansion of uniformly accelerated motion; but that there would occur in the system a moment of simple, absolutely uniform velocity, that is, one not determined by the higher power of one of the moments of the motion, this, as remarked earlier,[120] is itself an empty assumption based solely on the routine of the method. Since the method has its inception in the representation of the increment which the variable is supposed to sustain, then of course a variable which is only a function of the first power can also sustain an increment; now, if in order to find the differential we have to subtract the difference of the second equation thus produced from the one given, the emptiness of the operation becomes obvious, for the so-called increment is the same for all the alterable terms themselves.

(β) We have identified the nature of the equation which we want to treat; now we must declare the *interest* that motivates our treatment of it. This consideration can only yield known results, especially in the form in which they are found in Lagrange's version; but in my exposition I have restricted myself to basic elements in order to eliminate from it any heterogeneous material otherwise mixed with it. – The patent basis for the treatment of an equation of this kind is that the power is taken to be a relation *inside itself*, a *system of relational determinations*. We said earlier

[120] Cf. above, 21.271.

21.279 that power is number which has attained a state at which it *determines its own alteration*; its moments, unity and amount, are identical – perfectly identical, as previously demonstrated, first of all in the square, and (a point of no consequence here) formally identical in the higher powers.[121] Now, since as number the power is an aggregate (even if one prefers the expression "magnitude" because of its greater generality, *in itself* power still is always a number) and is also presented as a *sum*, it can be directly broken up internally into an arbitrary grouping of numbers that have no other determination with respect to each other and to the sum except that together they equal the latter. But the power can also be divided into a sum of distinct terms determined by the *form of the power*. If the power is taken as sum, then its radical number, the root, is also taken as a sum – arbitrarily, after repeated division, the manifoldness as something indifferent, empirically quantitative. The sum which is supposed to be the root, reduced to its simple determinateness, that is, its true generality, is the *binomial*; any other increase of the terms is a mere *repetition* of the same determination and, therefore, something empty.[m] What matters here is only the *qualitative determinateness* of the terms which result from the *raising to a power* of the root taken as sum, a determinateness which lies solely in the alteration which the potentiation is. Consequently, these terms are wholly *functions of the potentiation and of the power*. Now this exposition of number as the *sum of an aggregate* of terms which are the functions of the potentiation, added to the interest in finding the *form* of such functions and also this sum from the aggregate of the terms, in so far as this find must depend on that form alone – this, as we know, constitutes the special theory of *series*. But it is essential here that we distinguish another source of interest, namely the *relation of the underlying magnitude* (of which the determinateness, since it is a complex, that is, an equation here, *includes in itself* a power) *to the functions of the raising of it to a power*. This relation,
21.280 taken in total abstraction from the just mentioned interest of the *sum*, will prove to be the only intended point of view of differential calculus which is in fact realized by the science.

But we must first add one more determination to what has been said, or, better, remove one which is there. For we have said that the power

[m] It pertains to the formalism of the *universality* to which analysis necessarily lays claim that instead of taking $(a + b)^n$ for the expansion of powers, $(a + b + c + d \ldots)^n$ is the expression used, as is also done in many other places. Such a form is to be regarded as, so to speak, a coquettish show of universality, for the *matter itself* is exhausted in the binomial. It is through the expansion of the binomial that *the law* is found, and the law is the true universality, not the external, merely empty repetition of it, which is all that $a + b + c + d \ldots$ produces.

[121] Cf. above, 21.201–202.

enters into the variable determination of a magnitude which is regarded as a sum *inside itself*, in fact a system of terms in so far as these are functions of the raising to a power, and that the root is also thereby regarded as a sum, in the simply determined form of a binomial: $x^n = (y + z)^n = (y + ny^{n-1}z + \cdots)$. This exposition was all right for the expansion of the power, that is, for obtaining the functions of its being raised to a power from the *sum* as such; but the issue here is not a *sum* as such or the *series* arising from it, *but* only the *connection* to be taken from the sum. All that remains after the *plus* of a sum as sum is abstracted from is, on the one hand, the *connection* as such of the magnitudes and, on the other hand, all that is needed for finding the functions of the expansion of the power. But that connection is already determined by the fact that the object here is an equation, $y^m = ax^n$, already a *complex* of several (variable) magnitudes which contains a power determination of them. In this complex, each of these magnitudes is posited simply as *connected* with the others, as a function of the other magnitudes – each carrying, as one could say, a *plus* in it. This *plus* determination is given to them by their character as functions of one another, but precisely for this reason the determination is totally *indeterminate*, is not an increase or an increment or the like. Yet even this abstract point of view could be left out of account; we can quite simply stop at the point where, since in the equation the variables are given as reciprocal functions in a determinateness which thus contains a relation of power, also the functions of the *raising to a power* of each are now compared with each other, and these second functions are determined by nothing else except the potentiating itself. *At the start*, to convert an equation of the powers of its variables into a relation of the functions of its expansion can be said to be a *matter of choice* or a *possibility*; only some further *purpose*, need or use, has to step in to indicate the *usefulness* of such a transformation; the transposition was occasioned by its usefulness alone. When we began just now with the exposition, in a magnitude which is taken as an *internally differentiated sum*, of these potentiating-determinations, this served only in part to indicate of which kind such functions were; in part, it was the way of finding them. **21.281**

What we have here is an adaptation for the purpose of differential calculus of the usual analytical form of development: an increment, *dx*, *i*, is assigned to the variable, and then the power of the binomial is expanded by the terms of the series belonging to it. But the so-called increment is supposed to be not a quantum, only a *form*, the whole value of which is that it *assists* in the development; it is admitted (notably by Euler and Lagrange, and in the representation of limit earlier cited) that what is

wanted are only the resulting power determinations of the variables, the so-called *coefficients*, namely of the increment and its powers, according to which the series is ordered and to which the different coefficients belong. It may be noted in this connection that since an increment with no quantum is being assumed here only for the sake of the development, it would have been more suitable to take 1 (the unit) for that purpose, for that increment constantly recurs as a factor in the development, and the factor of one fulfills precisely the purpose of having an increment without any quantitative determinateness or alteration being posited thereby; whereas *dx*, burdened as it is by the false representation of a quantitative difference, and other signs such as *i*, burdened for their part by a show of generality that is here pointless, always have the semblance and the pretension of a *quantum* and its *powers*; and the pretension, despite its being just that, brings with it the trouble of *removing* and *omitting* what is pretended. In order to retain the form of a series expanded on the basis of powers, the designations of the exponents as **indices** could just as well be attached to the one. But in any case, abstraction must be made from the series and the determination which the coefficients have according to the place they occupy in it; the relation between all of them is the same; the second function is derived from the first in exactly the same manner as this is derived from the original, and for any function counted second, the one derived first is again the original. But the essential point of interest is not in the series, but solely in the determination of the power that results from the expansion, as related to the *magnitude which for the power determination is immediate*. Therefore, instead of defining it as the *coefficient* of the *first* term of the development (for a term is designated as the *first* with reference to the others that follow it in the series, but any such power as that of an increment, like the series itself, has no place here), the plain expression, "derived function of a power," or the just said, "function of the raising of a magnitude to a power," would be preferable; these are expressions which
21.282 presuppose that the derivation is a development falling *within* a power.

Now if the strictly mathematical beginning in this part of the analytic is nothing more than the finding of the function determined by the expansion of the power, the next question is what to do with this relation thus obtained; where does it have an *application* and *use*; in effect, for what *purpose* are such functions sought. It is because of relations *in concrete objects* which allow reduction to those abstract, analytical functions, that differential calculus has become the source of great interest.

But as regards the question of the application, this much follows directly from the nature of the fact itself, because of the form which the moments of

a power assume as demonstrated, without having to infer it from individual cases of the application itself. Namely, the development of the magnitudes of the powers that yields the functions of their potentiation entails at first, abstraction made of a more precise determination, simply the *reduction* of their magnitude to the next lower power. This *applicability* of this operation is to be found, therefore, in connection with *objects* in which there is likewise present such a difference of power determinations. Thus, if we reflect on the *properties of space*, we find that space has three dimensions which, in order to distinguish them from the abstract differences of height, length, and breadth, we can call *concrete*. They are, namely, line, plane, and total space. And if we take them in their simplest form and with reference to self-determination and consequently to analytical dimensions, we then have straight line, plane surface, and surface as square and as cube. The straight line has an empirical quantum, but with the plane there enters the qualitative element, the power determination. More detailed considerations, e.g. that the case extends to plane curves, we can leave undiscussed, for we are concerned primarily with the distinction in general. It is here that the *need* also arises *to pass from a higher power to a lower*, *and vice-versa*, when, for instance, linear determinations are to be derived from given equations of the plane, etc., or vice-versa. – The *motion*, further, in connection with which we have to consider the quantitative relation of the space traversed to the time elapsed in traversing it, assumes the various determinations of a simply uniform motion, a uniformly accelerated one, and one which is alternatively uniformly accelerated and uniformly retarded (motion that turns back upon itself); inasmuch as these various species of motion are expressed in accordance with the quantitative relation of their moments, of space and time, we have for them equations of various power determinations, and inasmuch as the need arises to determine one species of motion, or also of spatial magnitudes to which a species of motion **21.283** is associated, from another species of motion, such an operation likewise entails the transition from one power-function to another, whether higher or lower. – These two examples will suffice for the purpose for which they were adduced.

The semblance of arbitrariness to which differential calculus gives rise in the course of its applications would already be brought under control by a consciousness of the nature of the areas in which an application can be made, of the particular need for the application and the condition under which it is made. But now, it is also within these same areas that one gets to know between which *terms* of a mathematical problem such a relation occurs as is properly posited by differential calculus. It must be noted first

of all that two relations are at issue here. The operation of lowering the degree of an *equation*, considered according to the derivative functions of its variables, yields a result which *in itself* no longer truly is an equation but is a *relation*; it is this relation which is the subject matter of *differential calculus proper*. Also given with it, secondly, is the relation of the higher power determination itself (the original equation) to the lower (the derivative). This second relation we must leave aside for the time being; it will prove to be the subject matter of *integral calculus*.

Let us start by considering the first relation, and, for the determination of the moment in which the interest of the operation lies (the moment to be derived from the so-called application), let us take the simplest example, that of curves defined by an equation of the second power. As we know, the relation of the coordinates is *directly* given by the equation in a power form. From the fundamental determination there follow the determinations of the other straight lines linked to the coordinates, the tangent, subtangent, normal, and so on. But the equations between these lines and the coordinates are *linear* equations; the wholes, of which these lines are determined as parts, are right-angled triangles formed by *straight* lines. The transition from the original equation in power form to these linear equations involves now the said transition from the original function, that is, one which is an equation, to the derived function, which is a *relation*, specifically, between certain lines contained in the curve. The problem is to find the link between the *relation* of these lines and the *equation* of the
21.284 curve.

It is not without historical interest to remark this much, that the first discoverers only knew how to report their findings in a wholly empirical manner without being able to give an account of the operation, which remained something completely external. I shall limit myself in this regard to citing Barrow, Newton's teacher. In his *Lect. Opt. et Geom.*, where he deals with problems of higher geometry according to the method of the indivisibles (a method which at first diverges from what is most characteristic of differential calculus), he also gives an account of his procedure for determining the tangents "because," as he says, "his friends so urged him" (Lect. X).[122] One must read for oneself how he sets up his problem to have a proper idea of this procedure; it is formulated wholly as an *external rule*, in the same style as was once, in the schoolbooks of arithmetic, the "rule of three," or better still the so-called "test of nine" for the four operations. He

[122] See Isaac Barrow, *Lectiones geometricae: In quibus (praesertim) generalia curvarum symptomata declarantur* (London, 1672), lecture 10, §14. The text is available in Early English Books online.

draws the tiny lines which were later called the *increments in the triangle characteristic* of a curve and then gives the instruction, as a mere *rule*, *to eliminate as superfluous* the terms which, as a result of the expansion of the equations, turn up as the powers of such increments or as products (*etenim isti termini nihilum valebunt*);[123] similarly to omit the terms which contain magnitudes only determined by the original equation (the subsequent subtraction of the original equation from the one construed with the increments), and finally to substitute, *for the increment of the ordinate*, *the ordinate itself*, *and*, *for the increment of the abscissa*, *the subtangent*. The procedure, if one may say so, could not be laid out in a more schoolmasterly form; the last substitution is the *assumption of the proportionality* of the increments of the ordinate and abscissa to the ordinate and subtangent which in the ordinary differential method is made the basis for the determination of the tangent; in Barrow's rule, this assumption stands out in all its naïve nakedness. A simple way of determining the subtangent was found. Roberval's and Fermat's artifices follow a similar course; the method for finding maximal and minimal values from which Fermat started rests on the same basis and the same procedure.[124] To find so-called *methods*, that is, rules of that kind, was the obsession of the time, and also to make a secret of them, which was not only easy but in one respect also necessary, for the very reason that made it easy – because the inventors had found only an empirical, external rule, not a method, that is, nothing derived from recognized principles. Leibniz was *indebted* for such so-called methods to his contemporaries, and Newton also was indebted to them, even though he *received* them directly from his teacher; by generalizing **21.285**
their form and range of application, they opened up new paths for the sciences, but in this they also felt the need to wrest the procedure free of the shape of external rules; they sought to give to it the necessary justification.

If we now analyze the method more closely, this is how it actually proceeds. *First*, the power determinations (understood, of the variables) contained in the equation are reduced to their first functions. But the *value* of the terms of the equation is thereby *altered*; there is no equation left, therefore, but what has arisen is instead only a *relation* between the first function of one variable and the first function of the other; instead of $px = y^2$, we have $p : 2y$; or instead of $2ax - x^2 = y^2$, we have $a - x : y$,

[123] Because these terms have no value.

[124] Cf. note 97 above. Gilles Personne de Roberval (1602–1675), French mathematician who developed powerful methods for the study of integration.

which it later became common to designate as the relation $\frac{dy}{dx}$. The equation is that of a curve, whereas this relation which is totally dependent on it and is derived from it (above, according to a *mere* rule), is a linear relation with which certain lines are in proportion; $p : 2y$ or $a - x : y$ are themselves relations of straight lines of the curve, the coordinates and the parameters. However, *with all this*, *nothing is as yet known*. The point of interest is to know, regarding *other* lines connected with the curve, whether *that derived linear relation applies to them* – to find out the equality of two relations. – *Second*, this is therefore the question: which are the straight lines determined by the nature of the curve? which stand in this relation? – But this is what was *known already*, namely that a relation obtained in this way is the relation of the ordinate to the subtangent. This the ancients had found out in an ingenious geometrical manner; what the moderns have discovered is the empirical procedure for setting up the equation of the curve in such a way that it will yield the first relation of which it *was already known* that it is equal to a relation containing the line to be determined (here the subtangent). Now, on the one hand, the setting up of this equation – the differentiation – has been methodically conceived and methodically executed; on the other hand, the imaginary increments of the coordinates, and the imaginary characteristic triangle formed by them and an equally imaginary increment of the tangent, were invented in order to present the proportionality of the ratio (which was obtained by lowering the degree of the equation) to the ratio of the ordinate and the subtangent, not as something just picked up empirically from something already known, but as demonstrated. However, in the external form that the cited rules assume, this already known something proves to be, everywhere and unmistakably, the sole occasion and justification for the *assumption of*, respectively, *the characteristic triangle and the said*
21.286 *proportionality*.

Lagrange was the one who did away with this pretense and pursued the genuinely scientific way. It is to his method that we owe the insight into the decisive point, for it consists in separating the two transitions required for the solution of the problem and in proving each by treating it by itself. The one side of this solution (inasmuch as, for the sake of detailing the steps involved, we restrict ourselves to the elementary example of the problem of finding the subtangent), the theoretical or general part, namely how to find the *first function* from the given equation of the curve, has its own internal rule: this part yields a *linear relation*, hence a relation of straight lines that occur in the system defined by the curve. The other part of the solution now consists in finding the lines in the curve that enter into such

a relation. And this is now done in a direct manner (*Théorie des Fonct. Anal. II* P. II, Chap.),[125] that is, without the characteristic triangle, which means without assuming infinitely small arcs, ordinates, and abscissas, and without attributing to these the determinations of dy and dx, that is, of the sides of that relation, and at the same time immediately the meaning of the equality of this relation with the ordinate and the subtangent themselves.[126] A line (like a point also) obtains determination only in so far as it constitutes the side of a triangle, and the determination of a point also lies in that. This, I may mention in passing, is the fundamental proposition of analytical geometry from which the coordinates of that science are derived, just as from it the parallelogram of forces is derived in mechanics (it amounts to the same thing), for which reason the many efforts to find a proof for it are quite superfluous. – The subtangent is now posited as the side of a triangle, the other sides of which are the ordinate and the tangent connected to it. The equation of the latter, as a straight line, is $p = aq$ (adding $+b$ is needless, but is done only out of fondness for generality); the determination of the *ratio* $\frac{p}{q}$ falls within a, the coefficient of q which is the respective first function of the equation but may simply be considered as $a = \frac{p}{q}$, and this is, as we said, the essential determination of the straight line applied to the curve as tangent. Since now, further, the first function of the equation of the curve is taken to be equally the *determination of a straight line*; and since p, the one coordinate of the first straight line, and y, the ordinate of the curve, are assumed to be the same – we assume, therefore, that the point at which the first straight line taken as the tangent touching the curve is equally the starting point of the straight line determined by the function of the curve – then all comes down to showing that this second straight line is congruent with the first, that is, is a tangent; or, algebraically **21.287** expressed, that since $y = fx$ and $p = Fq$, assuming that $y = p$ and hence $fx = Fq$, also $f'x = F'q$. Now, that the straight line applied as tangent and the straight line determined from the equation by way of its first function coincide, that this last is also tangent, this is demonstrated with the aid of the *increment i* of the abscissa and the increment of the ordinate determined by the expansion of the function. Here also, therefore, the infamous increment steps in. However, how it is here introduced for the purpose just stated, and how the function is expanded with its aid, must be distinguished from the earlier mentioned use of the increment in finding

[125] See Lagrange, *Théorie des fonctions analytiques*, Part 2, Chapter 2, §§5, 6.

[126] "*. . . und zugleich unmittelbar die Bedeutung der Gleichheit desselben* [i.e. the relation] *mit der Ordinate und Subtangente selbst zu geben*."

the differential equation and in the characteristic triangle. Its use here is both justified and necessary; it falls within the parameter of geometry, for it is of the definition of a tangent as such that between it and the curve with which it has a point in common, no other straight line can be drawn which also passes through this same point. For, as thus determined, the quality of tangent or non-tangent is reduced to a *quantitative difference*: the tangent is the line to which, with respect to the determination here at issue, the *greater smallness* accrues. This seemingly only relative smallness contains nothing empirical whatever, that is, nothing that depends on a quantum as such; it is posited as qualitative by the nature of the formula, whenever the difference of the moment on which the magnitude to be compared depends is a difference of power; since this difference comes down to i and i^2, and i (which after all is supposed to signify a number) is then to be represented as a fraction, i^2 is *in and for itself* smaller than i, so that even the representation of an *arbitrary* magnitude in which i might be taken is here superfluous and in fact out of place. Precisely for this reason the demonstration of the greater smallness has nothing to do with something infinitely small, for which there is thus no need to bring it in here at all.

Even if only for its beauty and its well-deserved but nowadays forgotten merit, I must also mention Descartes's tangential method; it has, at any rate, a bearing on the nature of equations regarding which yet one more remark is to be made. Descartes expounds this independent method, in which the required linear determination is likewise found from the same derivative function, in his geometry, a seminal work in other ways as well (liv. II, p. 357 ss. *Oeuvres compl.* Ed. Cousin Tom V).[127] It is here that he taught the great basis of the nature of equations and their geometrical construction, and of the application of analysis, which he thereby greatly expanded in scope, to geometry. The problem takes with him the form
21.288 of a task, of drawing straight lines perpendicularly to given points on a curve in order in this way to determine the subtangent, etc. One can understand his satisfaction at a discovery which met the one object of universal scientific interest at the time; and it was so purely geometrical that it vastly surpassed the merely rule-bound method of his rivals cited above. As he expressed it there: "*J'ose dire que c'est ceci le problème le plus utile et le plus général, non seulement que je sache, mais même que j'aie jaimais désiré*

[127] The work referred to by Hegel is Descartes's *Oeuvres complètes*, Volume 5, edited by Victor Cousin (Paris: F.G. Levrault, 1824). For an English version, see *The Geometry of René Descartes*, trans. David Eugene Smith and Marcia L. Latham (La Salle, IL: Open Court, 1952), pp. 95ff.

de savoir en géometrie."[128] – He bases his solution on the analytical equation of the right-angled triangle formed by (1) the ordinate of the point on the curve to which the required straight line in the problem should be drawn perpendicularly; (2) by this same straight line (the normal); (3) by that part of the axis cut off by the ordinate and the normal (the subnormal). Now from the known equation of a curve, the value of either the ordinate or the abscissa is substituted in the equation of this triangle, the result being an equation of the second degree (and Descartes shows how even curves of which the equations are of higher degrees reduce to this) in which only one of the variables still occurs, indeed as a square and in the first power. This is a quadratic equation which makes its first appearance as a so-called impure equation. Descartes now observes that if the point assumed on the curve is imagined as at the intersection of the curve and a circle, this circle will cut the curve at yet another point, and the result for the two unequal *x*s thus produced will be two equations with the same constants and of the same form, or else only *one* equation with unequal values of *x*. But there will be only *one* equation for the *one* triangle in which the hypotenuse is perpendicular to the curve (the normal) – as we can imagine if we let the two intersection points of curve and circle coincide, and the circle therefore touch the curve. With that, however, the circumstance which makes for the *unequal roots* of the *x* or *y* of the quadratic equation also falls away. But now, in a quadratic equation of two equal roots the coefficient of the term containing the unknown in the first power is double the *single* root, and this now yields an equation for obtaining the desired determinations. This procedure is indeed the brilliant stroke of a truly analytical mind. The merely asserted proportionality of the subtangent and the ordinate with the alleged infinitely small so-called increments of the abscissa and the ordinate pale in comparison.

21.289 The final equation obtained in this way, in which the coefficient of the second term of the quadratic equation is equated with the double root or the unknown, is the same as is obtained by the method of differential calculus. The differentiation of $x^2 - ax - b = 0$ gives the new equation $2x - a = 0$, or $x^3 - px - q = 0$ gives $3x^2 - p = 0$. Of course, the point can be made here that it is not by any means self-evident that such a derivative equation is also correct. Only a *ratio*, as remarked above,[129] results from an equation of two variables which, just because they are variables, do not lose their character as unknowns, for the simple reason that, by

[128] Ibid. "I dare say that this problem is the most useful and the most general not only that I know, but that I have ever desired to resolve in geometry." *The Geometry of René Descartes*, p. 95.

[129] Cf. above, 21.285.

substituting the functions of power-raising for the powers themselves, the value of the two terms of the equation are altered, and whether an equation still obtains between the two terms in their thus altered value is still *per se* unknown. All that the equation $\frac{dy}{dx}$ expresses is that p is a *ratio*, and there is no otherwise real meaning to ascribe to $\frac{dy}{dx}$. But it is equally still unknown of this ratio $= p$ to what other ratio it is equal; it is only the equation, the *proportionality*, that gives a value and meaning to it. – Just as we said that this meaning, then a matter of application, is taken from elsewhere, empirically,[130] so with respect to the equations now at issue which are derived by differentiation, it is from elsewhere that we must know whether they have equal roots in order to find out whether the equation obtained is still correct. This is a circumstance, however, which the textbooks fail to bring to explicit notice; it is of course eliminated when an equation of one unknown, reduced to zero, is straight away equated with y, with the result, mind you, that by differentiation only a ratio, a $\frac{dy}{dx}$, is obtained. Of course, the calculus of functions should deal with the functions of power-raising while differential calculus with differentials; but it by no means follows from this as a matter of course that the magnitudes of which we take the differentials or functions of power-raising would themselves also have to be *only* functions of *other* magnitudes. Besides, in the theoretical part, where it is shown how to derive the differentials, that is, the functions of power-raising, there is still no indication that the magnitudes which we learn to manipulate in such a derivation are supposed to be themselves the functions of other magnitudes.

Regarding the omission of the constant in differentiation, *attention* can further be drawn to the fact that the meaning of the omission here is that it makes no difference to the determination of the roots if these are
21.290 equal, for this determination is exhausted by the coefficients of the second term of the equation. As in the cited example of Descartes, the constant is itself the square of the roots, which can therefore be determined by the constant as well as the coefficients – the constant being no less than the coefficients simply the function of the roots of the equation. In the usual exposition, the omission of the so-called constants which are linked to the other terms only by the *plus* and *minus* signs results from the mechanism of the procedure by which, in order to find the differential of a compound expression, an increment is assigned only to the variables, and the expression thereby formed is subtracted from the original. Nothing is said regarding

[130] Cf. above, 21.283.

the meaning of the constants and of their omission, the extent to which they are themselves functions and, as such, do or do not serve any purpose.

In connection with the omission of the constants, a similar comment can be made regarding the *names* of differentiation and integration as was earlier made regarding the expressions "finite" and "infinite," namely that the term says the opposite of what is intended.[131] "To differentiate" indicates the positing of differences, whereas by being differentiated an equation is in fact reduced to fewer dimensions; with the omission of the constant a moment of determinateness is taken away; as we said,[132] the roots of the variables are made equal, *their difference therefore sublated*. In integration, by contrast, the constant must be added back in again; the equation is thereby integrated, but, note well, only in the sense that the previously sublated *differentiation* of the roots *is restored*, what was posited as equal is differentiated again. – The ordinary expression contributes to the obfuscation of the essential nature of the matter by directing the focus of attention to what is in fact subordinate, even alien to it – on the one hand, to the infinitely small difference, the increment, and the like; on the other hand, to the mere difference in general between the given and the derived function, without any indication of their specific, that is, qualitative, distinction.

Another important area in which differential calculus is employed is *mechanics*. The meaning of the various power functions that result from the elementary equations of its subject matter, *motion*, has already been adumbrated in passing.[133] I shall now take it up directly. The equation, that is, the mathematical expression, for plain uniform motion ($c = \frac{s}{t}$ or $s = ct$, where the spaces traversed are proportional to the elapsed times according to an empirical unit c which is the magnitude of the velocity) **21.291**
offers no scope for differentiation; the coefficient c is already fully determined and known, and no further expansion of powers is admissible. – We called attention earlier to how $s = at^2$, the equation of the motion of a falling body, is analyzed:[134] the first term of the analysis, $\frac{ds}{dt} = 2at$, is translated into language and accordingly into concrete existence to mean that we must suppose a term of a *sum* (a conception which we have long since abandoned), a term which is a part of the motion, specifically, that it falls on the side of the force of inertia, that is, of absolutely uniform velocity, with the result that in *infinitely small* parts of time the motion is *uniform*, but in the *finite* parts, that is, in those actually existent, it is

[131] Cf. above, 21.246. [132] Cf. above, 21.289.
[133] Cf. above, 21.262–263, footnote. [134] Cf. above, 21.262–263, footnote.

uneven. To be sure, $fs = 2at$; and the meaning of a and of t is known and so, too, that the determination of the uniform velocity of a motion is thereby being posited: since $a = \frac{s}{t^2}$, $2at$ is simply equal to $\frac{2s}{t}$. But with that, absolutely nothing new is known. Only the false assumption that $2at$ is a part of the motion as a *sum* gives the false semblance of a physical proposition. The factor itself, a, the empirical unit (a quantum as such) is attributed to gravity. If the category of the force of gravity is used, then it ought rather to be said that the whole, $s = at^2$, is the effect of gravity, or, better, the law of it. – The same goes for the proposition derived from $\frac{ds}{dt} = 2at$, that *if* gravity ceased to act, then the body would attain with the velocity reached at the *end* of its fall twice the distance it had traversed, in the same period of time as the fall. – Here too we find an unsound metaphysics; the *end* of the fall, or the *end* of a time-period in which the body has fallen, is itself still a period of time; if it were *not* a time-period, then *rest* would be assumed and therefore no velocity; velocity can only be calculated according to the distance traversed in a period of time, not at its end. – And if now finally an application of differential calculus is made in other physical fields where there is no motion, as for example in the behavior of light (apart from what is called its propagation in space) or in determining magnitudes with reference to colors, and the first function of a quadratic function is here also called a velocity, then this must be regarded an even more inadmissible formalism, a fiction of actual existence. –

We find the motion represented by the equation $s = at^2$, says Lagrange,[135] in the experience of falling bodies; the next simplest motion
21.292 would be one of the equation $s = ct^3$, but no such motion is found in nature; we do not know what the coefficient c might mean. Although that might well be so, there is a motion nevertheless of which the equation is $s^3 = at^2$ (this is Kepler's law of the motion of the bodies of the solar system), and what the meaning here of the first derived function, $\frac{2at}{3s^2}$, etc., might be, and the further direct manipulation of this equation by differentiation, the development of the laws and the determinations of the absolute motion *from this starting point* – all this must on the contrary appear indeed as an interesting problem, an opportunity for analysis to display its worth at its most brilliant.

Thus the application of differential calculus to the elementary equations of motion is not by itself of any *real* interest; the formal interest comes from

[135] See Lagrange, *Théorie des fonctions analytiques*, Part 3, Chapter 1, §2.

the general mechanism of calculus. But this dissection of motion takes on another meaning in connection with the determination of its trajectory. If this trajectory is a curve and its equation contains higher powers, then there is need of transitions from the rectilinear functions, which are the functions of power-raising, to the powers themselves, and since such functions are to be obtained by eliminating from the original equation of motion the factor of time which is contained in it, this factor is at the same time to be reduced to the lower functions of expansion from which those linear equations can be obtained. Here we are led to where the interest of the other part of calculus lies.

The aim of the foregoing has been to highlight the simple, specific nature of differential calculus by defining it, and to demonstrate it in some elementary examples. Its nature has been found to consist in this, that the coefficient of the term of the expansion, the so-called first function, is obtained from an equation of power-functions, and the *relation* which this first function represents is demonstrated in moments of the concrete subject matter, and these moments are themselves determined by the equation thereby obtained between the two relations. We must equally consider in brief, regarding *integral calculus*, what can be learned of its specific, concrete nature from the application of its principle. Taking stock of this calculus is already made simpler and more accurate by the fact that we no longer take it as the *method of summation* from which it got its name in opposition to differential calculus, in which the increment is taken to be the essential ingredient, and which gave to it the semblance of being essentially linked to the form of a series. – The task of this calculus is on the face of it just as theoretical, or rather formalistic, as that of differential calculus, although, as is well known, it is the converse of the latter. Here we begin with a function considered as *derived*, as the coefficient of the first term resulting from the expansion of an equation as yet however unknown, and the original power-function is to be derived from it; the function which in **21.293** the natural order of expansion would have to be considered as original is here derived, and the one previously considered as derived is here the one given, or in general the one to start with. Now the formal details of this operation seem to have already been attended to by differential calculus, where the transition from the original to the expansion-function, and the relation of the one to the other, is established in general. Here, although in order to set up the function which is the starting point, or again, in order to effect the transition from it to the original, recourse must necessarily be made in many cases to the *serial form*, it is important nevertheless to keep

in mind that, as such, this form has nothing directly to do with the proper principle of integration.

Now it is in view of the formalism of its operation that the other part of the task of calculus appears as the *application* of the operation. This is itself now the *task*, namely to find the *meaning*, in the above mentioned sense, of the original function (the one considered as first by the given function) of a particular object. It might seem that this doctrine, too, was in principle already settled in differential calculus, except for a further circumstance that comes into the picture and will not let the matter rest so simply. For by finding out that in this calculus the linear relation is obtained through the first function of the equation, we also know that the integration of this relation yields the equation of the curve in the relation of abscissa and ordinate; or, if the equation for the area enclosed by the curve were given, then, regarding the meaning of the first function of this equation, we should have already learned from differential calculus that such a function displays the ordinate as a function of the abscissa, and therefore the equation of the curve.

But now, all comes down to determining which of the moments of the object is *given* in the equation itself; for analytical manipulation can only start from what is given and then pass on to the determination of the rest of the object. For instance, what is given in the equation of the curve is not the equation of an area enclosed by that curve, nor of some supposed body arising from its rotation, nor again of an arc of the curve, but only the relation of the abscissa and ordinate. Consequently, the transitions from those determinations to this equation itself cannot yet be handled in differential calculus; it is reserved for integral calculus to find these
21.294 relations.

But further, it has been shown that the differentiation of an equation of several variables yields the expansion-power or the differential coefficient not as an equation but only as a ratio;[136] the problem then is to find in the moments of the given object a second ratio which is equal to this *ratio* which is the *derived* function. By contrast, the object of integral calculus is the *relation* itself of the *original* function to the *derived* function which is here presumed given, and the task is to assign in the object of the first given function the meaning of the original function yet to be found. Or rather, since this *meaning* (say, the area enclosed by a curve or the rectification of a curve represented as rectilinear) is already declared to be

[136] Cf. above, 21.265.

the problem, the task is to show that such a determination is found by an original function; also to show which of the moments of the object is the one that must be assumed *for the present purpose*, *as the initial* (derivative) function.

Now the usual method makes things easy for itself by representing the difference as one of infinitely small elements. Thus for the squaring of curves, an infinitely small rectangle, a product of the ordinate in the element (that is, the infinitely small segment) of the abscissa, is taken for the trapezium which has as one of its sides the infinitely small arc opposite that infinitely small segment of the abscissa; the product is then integrated in the sense that the integral is said to give the sum of the infinitely small trapezia or the surface of which the determination is being sought, namely the *finite* magnitude of this element of the area. In the usual method, a right-angled triangle is likewise formed from the infinitely small elements of an arc and the corresponding ordinate and abscissa – a triangle in which the square of the arc is said to equal the sum of the squaring of both the other two elements, their integration yielding the arc as a finite quantity.

This procedure presupposes the general discovery on which this field of analysis rests, in this case inasmuch as the squared curve, or the rectified curve, etc., stands to a certain function given by the equation of the curve *in the relation of the so-called original function to the derivative*. The point is to know, granted that a certain part of a mathematical object (say, a curve) is the derived function, which other part of the same object is expressed by the corresponding original function. It is known that when the function of the *ordinate* given by the equation of the curve is taken as the **21.295**
derived function, the corresponding original function is the quantitative expression of the *area* of the curve cut off by this ordinate; that when a *certain tangential determination* is considered the derivative function, its original function expresses the length of the *arc* that belongs to this tangential determination, etc. However, that these relations – the one, of an original function to the derived; the other, of the magnitudes of two parts or circumstances of the mathematical object – that these constitute a proportion, the method that employs the infinitely small and operates with it mechanically spares itself the trouble of recognizing and demonstrating it. The true merit of mathematical acumen is that, from results already known elsewhere, it has found that certain sides of a mathematical object stand to each other in the relationship of original and derived function, and it has found which sides these are.

Of these two functions, the derivative or, as has been defined, the function of power-raising, is the one in this calculus which is the *given*, relative to the original which is to be found from it by integration. This derived function, however, is not immediately given, nor is it by itself already given which part or determination of the mathematical object should be considered as the derived function in order that, by reducing it to the original, the other part or determination whose magnitude is being sought in the problem might be found. For the purpose of this problem, the usual method begins, as we said,[137] simply by representing as infinitely small certain parts of the object, in the form of derived functions determinable by differentiation from the originally given equation of the object in general (like the infinitely small abscissæ and ordinates in the rectification of a curve); from these parts it then takes those which can in some way be linked by elementary mathematics with the matter of the problem, likewise represented as infinitely small (in our example, the arc), and by virtue of this connection, once these parts are known, that part is also determined of which the problem was to find the magnitude. Thus, for the rectification of curves, the three mentioned infinitely small parts of the object are linked together in the equation of the right-angled triangle, while for the squaring of curves the ordinate is linked with the infinitely small abscissa to form a product, since in general arithmetic an area is assumed to be the product of lines. The transition from such so-called elements of the area, the arc, etc. to the magnitudes of the area, the arc, etc. as such, passes then only for the ascent from the infinite to the finite expression, or to the *sum* of the infinitely many elements of which the required magnitude is supposed to consist.

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It is therefore only superficially that one can say that the problem of integral calculus is only the albeit more difficult converse of the problem of differential calculus. The *real* interest of integral calculus is directed rather exclusively at the reciprocal relation in concrete objects of original and derivative function.

Also in this part of calculus Lagrange did not try just to smooth over the difficulty of the problems at hand with direct assumptions.[138] Here, too, it will help to elucidate the nature of the issue if we give the essence of his method with the help of a few examples. The task of this method is still the same: *to prove* that between particular elements of a mathematical whole, e.g. a curve, a relation of original to derived function obtains. But now, in this field the proof cannot go through directly simply by virtue of the

[137] Cf. above, 21.284. [138] Lagrange, *Théorie des fonctions analytiques*, Part 2, §27.

nature of the relation at issue, for the latter connects *elements* within the mathematical object *which are qualitatively different* – curves with straight lines, linear dimensions and their functions with plane or plane dimensions and their functions, etc. The required determination can only be taken, therefore, as the mean between a *greater* and a *lesser*. With this, of course, the form of an *increment* with a *plus* or *minus* naturally comes into play again, and Lagrange's vigorous "*développons*" can be heard again; but we have already pointed out how the increments have here only arithmetical, finite meaning.[139] From the expansion of that condition, that the magnitude to be determined be greater than the one easily determinable limit and smaller than the other, it is then deduced that, e.g. the function of the ordinate is the derived first function with respect to the function of the area.

Lagrange's exposition of the rectification of curves, since it proceeds from the principle of Archimedes, involves the *translation* of the Archimedean method into the principle of modern analysis, and this affords us an insight into the inner, the true meaning, of an endeavor which in the other method is carried out mechanically.[140] The mode of procedure is necessarily analogous to the one just given. But Archimedes' principle, that the arc of a curve is greater than its chord and smaller than the sum of the two tangents drawn at the endpoints of the arc and contained between these two points and the point of their intersection, does not yield any direct equation. Its translation into modern analytical form consists in the invention of an expression which is *per se* a simple fundamental equation, whereas in the earlier form the principle simply *postulates* alternating *ad infinitum* between terms each time determined as too great and too **21.297**
small, the successive advance only yielding new terms which are still too great and too small, albeit between always narrowing limits. On the basis of this formalism of the infinitely small, the equation $dz^2 = dx^2 + dy^2$ is formulated without further ado. Lagrange's exposition, on the contrary, starting from this same basis, demonstrates that the length of the arc is the original function with respect to a derived function, the characteristic term of which is itself a function coming from the relation of a derived function to the original function of the ordinate.

The fact that the representation of the infinitely small occurs in the method of Archimedes, just as later in Kepler's treatment of stereometric objects,[141] has been adduced as authority for the employment of the

[139] Cf. above, 21.287. [140] Lagrange, *Théorie des fonctions analytiques*, Part 2, §29.

[141] Johannes Kepler, *Nova stereometria doliorum vinariorum* (*The Stereometry of Wine Barrels*, 1615), Part I, Theorem III, where Kepler refers to Archimedes' use of indirect proof to deal with

infinitely small in differential calculus, without any thought being given to its distinctive particularities. The infinitely small signifies in the first instance the negation of the quantum as such, that is, of the so-called *finite* expression, of the completed determinateness that quantum as such possesses. Similarly, in the subsequent renowned methods of Valerius[142] and Cavalieri[143] among others, methods which are based on the treatment of the *relations* of geometrical objects, the fundamental principle is that the *quantum* of the terms treated at the moment only in relation must, as such, be left out of account for this purpose, and the terms themselves be taken as *non-quantitative*. But, for one thing, these methods all fail to recognize, and to bring to notice, the *affirmation* that hides behind the merely negative determination. This is the affirmation which we saw earlier[144] in abstract form as the *qualitative* determinateness of quantity and, in more determined form, as the qualitative determinateness found in the relation of powers. And also, since this same relation of powers contains in turn an aggregate of more precisely determined relations such as that of a power and its expansion function, these relations also would have in turn to be based on, and derived from, the general and negative determination of still the same infinitesimal. Now, in Lagrange's exposition just cited, the determinate moment of affirmation implicit in Archimedes' method of developing the problem is made explicit, with the result that a procedure otherwise affected by a limitless progression is given its due limit. The greatness of the modern discovery in itself and in its capacity to solve hitherto intractable problems, and to handle in simpler fashion those previously soluble, is to be laid solely in the discovery of the relation of the original to the so-called derivative functions and of those parts of a mathematical whole which stand in such a relation.

21.298 These excursions may suffice for the purpose of highlighting what is distinctive about the relation of magnitudes which is the subject matter of the particular kind of calculus under discussion. It was possible to limit them to simple problems and the methods of solving them; nor would it have been expedient for the conceptual work which was our only concern here, or within this author's competency, to go over the whole

"*multi multa*," "multitudes of multitude," in *Gesammelte Werke*, Band IX, *Mathematische Schriften* (Munich, 1960), p. 15.

142 Lucas Valerius (†1618) extended the doctrine of the center of gravity to solid bodies.

143 Cavalieri, *Geometria indivisibilium continuorum nova* (1635); *Exercitationes geometricæ sex* (Bologna, 1647).

144 Cf. above, 21.275.

compass of the so-called application of differential and integral calculus, to reduce all their problems and their solutions to the principle on which, as we have inductively shown, that application rests, and thereby to complete this inductive work itself. But what was said has sufficiently demonstrated that just as for each specific form of calculating there corresponds as subject matter a corresponding particular determinateness or relation of magnitude – such a relation as constitutes addition, multiplication, the raising to powers and the extraction of roots, the operations with logarithms, series, etc. – the same is the case for differential and integral calculus; for the object specific to the latter, the most suitable name might be that of the relation between a function of powers and the function of its expansion or potentiation, because it is the closest to what an insight into the nature of the subject matter suggests. Of course calculus makes use quite in general of logarithms, of circular functions and series, especially in order to render more tractable expressions devised for the required operations of deriving the original functions from the functions of expansion, but it uses them in the same way as it uses the operations involved in the other relations of magnitude, such as addition, etc. Calculus, whether differential or integral, has indeed a more specialized interest in common with the form of series, namely that of determining the functions of expansion which in the series are called coefficients of the terms; but whereas the interest of calculus only extends to the relation of the original function to the closest coefficient of its expansion, the aim of the series is to display as a sum aggregates of terms ordered according to the powers fitted with those coefficients. The infinite of the infinite series, the indeterminate expression of the negativity of the quantum in general, has nothing in common with the affirmative determination present in the infinite of calculus. The same is the case for the infinitesimal, the *increment* by means of which the expansion happens in the form of a series: it is only an external means for that expansion, and its so-called infinity either has only the meaning of such a means or has none at all. The series, since in fact it is not what is being sought, brings with it a *de trop* which then creates the otherwise superfluous trouble of eliminating it. The method of Lagrange has again privileged this form of series, and is therefore burdened by that trouble, even though it is by virtue of that **21.299** method that the true character of what is called the *application* is brought out in the latter, for it directly demonstrates, without imposing the forms of *dx*, *dy*, etc., *unto the objects*, to which part of these objects the determinateness of the derived function (function of expansion) belongs. And

it transpires thereby that the form of series is not what is truly at issue here.[n]

Remark 3

Further forms associated with the qualitative determinateness of magnitude

The affirmative meaning of the infinitesimal of differential calculus is that it is the *qualitative* determinateness of magnitude, and, regarding this
21.300 determinateness, we have shown in particular that it is present in this calculus not only as a power determinateness in general, but as specifically determining the relation of a function of powers to the power of the expansion. This qualitative determinateness is also present, however, in another weaker form, so to speak, and this form, together with the use of the infinitesimal associated with it and the meaning that the latter has in this use, will be the subject of the present Remark.

Before we proceed, however, it should be recalled at this juncture that the different power determinations first come in from the *analytical* side, that they are there merely formal and totally homogeneous, that they signify *numerical magnitudes* which, as such, are not qualitatively differentiated from each other. It is in the application to spatial objects that the analytical relation fully shows itself in its qualitative determinateness as the transition from linear to plane determinations, from the determinations of straight

[n] In the already cited critique (*Jahrb. für wissensch. Krit.* II, Vol. 1827, Nr. 155, 6ff.),[145] are to be found interesting opinions of a learned specialist in the subject, Herr Spehr.[146] They are quoted from his *Neue Principien des Fluentencalculs* (Braunschweig, 1826), and concern a matter which has contributed substantially to the issue of obscurities and unscientific claims in differential calculus; moreover, they accord with what we have said concerning the general orientation of the *theory* of this calculus. To quote: "Purely *arithmetical investigations* – admittedly those which more than all other have direct bearing on differential calculus – have not been separated from this calculus proper. Indeed, they have even been taken, as by Lagrange, for what is *of the essence* of the calculus while calculus itself has been regarded as only the *application* of them. These arithmetical investigations include the rules of differentiation, the derivation of Taylor's theorems, and so on, even the various methods of integration. But *the case is quite the reverse*, for it is these *applications* that make up the *subject matter* of differential calculus *proper*, which *presupposes* all those arithmetical developments and operations from analysis." – We have shown how, with Lagrange, the separation of the so-called application from the procedure of the general part which takes its start from the series serves precisely to bring to light the *proper subject* of differential calculus. However, it is strange that the author, despite entertaining the interesting view that it is precisely the so-called *applications* that constitute the *subject matter* of differential calculus *proper*, would then himself divagate (ibid.) into the formalistic metaphysics of *continuous magnitudes*, *becoming*, *flow*, etc., and would want to add new ballast to old. These determinations are *formal*, in the sense that they are only general categories which fail to give precisely *that which is specific to the subject matter*. But this is what was to be recognized in, and be abstracted from, the concrete propositions, the applications.

[145] Cf. above, 21.267, Hegel's footnote.

[146] Friedrich Wilhelm Spehr (1799–1833), mathematician and cartographer in Braunschweig, best known for his *Vollständiger Lehrbegriff der reinen Kombinationslehre* (1824).

line to those of curves, etc. This application also brings in train that the spatial objects which are given in the form of *continuous* magnitudes in accordance with their nature will be taken *discretely*, the plane as an aggregate of lines, the line as an aggregate of points, etc. The sole interest of this dissolution is to determine the points and the lines into which the lines and the planes have respectively been resolved in order to be able, starting from this determination, to proceed analytically, that is, in truly arithmetical fashion; for the sought magnitude determinations these starting points are the *elements* from which the function and the equation for the *concrete*, that is, the *continuous*, magnitude are to be derived. For the problems where the use of this procedure is of special interest, it is requisite that the element which is *the starting point be self-determined*, in *contrast* with the indirect procedure which can start only with *limits* and seek between them the self-determined element which is its *goal*. But if it is only the law of progressively determining magnitudes without however ever possibly attaining the required perfect, that is, the so-called finite, determination, then in both methods the result amounts to the same thing. To Kepler is ascribed the honor of first having thought of that reversal of procedure and of having made the discrete the starting point. His explanation of how he understands the first proposition of Archimedes' cyclometry conveys this quite simply.[147] This proposition, as we know, is that the circle is equal to a right-angle triangle, one side of which enclosing the right angle equals the diameter of the circle and the other its circumference. Since Kepler takes this proposition to mean that the *periphery* of the circle has as many parts as it has *points*, that is, infinitely many, each of which can be regarded as the base of an isosceles triangle, he thereby gives expression to the *resolution* of the *continuous* into the form of *the discrete*. The expression "infinite" which occurs here is still far removed from the meaning which it is supposed to assume in differential **21.301**
calculus. – Now when a determinateness, a function, has been found for such discrete elements, these should be summed up further, as essentially elements of the continuous. But since a sum of points will not yield a line, nor a sum of lines a surface, the points are *straight away* taken as *already linear*, just as the lines are taken as two-dimensional. But again, since linear elements *ought not* to be lines yet, which they would be if they were taken as quantum, they are represented as *infinitely small*. The discrete is only capable of an *external* combination in which the moments retain the meaning of discrete units; the only transition analytically made from these

[147] See note 141, above.

units is to their *sum*; nor is there a geometrical transition from *point* to line, or from *line* to surface, etc.; therefore the element which is determined as a point or a line is also given, together also with this determination, the quality of being as point linear or as line two-dimensional, in order that their sum would indeed become, as the sum of tiny lines, a line, and, as the sum of tiny planes, a plane.

It is the need to get hold of this moment of qualitative transition and for this reason to have recourse to the *infinitely small* that must be regarded as the source of all the representations which, though meant to smooth out every difficulty, are themselves the greatest difficulty. But to dispense with these aids, it would have had to be possible to show that contained even in the analytical procedure, which otherwise appears as a mere *summation*, there is in fact already a *multiplication*. But a fresh assumption is trotted out at this juncture which provides the basis for this application of arithmetical relations to geometrical figures. The assumption is that arithmetical multiplication is also for the geometrical determination a transition to a higher dimension, that the arithmetical multiplication of magnitudes spatially determined as *lines* is at the same time a promotion of the linear to the status of *two-dimensional determination*; three times four linear feet gives twelve linear feet, but three linear feet *times* four linear feet gives twelve plane-feet, that is, square-feet, since the unit in both factors, as discrete quanta, is the same. The *multiplication* of *lines* by lines appears at first sight to make no sense, for multiplication has to do simply with numbers, that is, it is an alteration of elements *totally homogeneous* with that into which they are altered, with *the product*, only the *quantity* alters. In contrast to this alteration, what has been called the multiplication of a line as such by a line (it has been named *ductus lineæ in lineam*, like the *ductus plani in planum*; there is also the *ductus puncti in lineam*) is an alteration not merely of magnitude, but of magnitude as a *qualitative*
21.302 *determination of spatiality*, of dimensionality; the transition of the line into plane is to be understood as the *self-externalization* of the line, just as the self-externalization of the point is a line and the self-externalization of the plane a whole space. This is the same as representing the *motion* of the point as being the line, and so on; but since motion entails time determination, it is more likely to appear in this way of representing it as merely accidental, an external alteration of state, whereas what is to be captured is the conceptual determination as expressed by self-externalization, that is, the qualitative alteration which, arithmetically, is the multiplication of unit (the point, etc.) by amount (the line, etc.). – It may also be remarked here that in the case of the self-externalization of the plane, which would appear

as a multiplying of surface by surface, there seems to emerge a difference of arithmetical and geometrical products, for that self-externalization, as *ductus plani in planum*, would arithmetically give a multiplication of a two-dimensional factor by another factor equally two-dimensional, and hence a product of four dimensions which, however, is reduced to three in geometrical determination. For its part, since number has the one as its principle, it yields the fixed determination for the external, quantitative element; but the product of its operation is to that extent formal. $3 \cdot 3$, taken as a numerical determination, when it reproduces itself, yields $3 \cdot 3 \times 3 \cdot 3$. However, the same magnitude, taken as the determination of a plane, in reproducing itself is held back at $3 \cdot 3 \cdot 3$, because space, imagined as a movement of transcendence which starts from the point, the limit which is only abstract, attains its true limit as *concrete* determinateness in the third dimension, starting from the line. The difference just referred to could prove relevant in the context of free motion, where the one side, the spatial, is subject to geometrical determination (according to Kepler's law, $x^3 : t^2$), and the other side, the temporal, to arithmetical determination.

How the qualitative moment being considered here differs from the subject of the previous Remark, should now be self-evident without further comment. In the earlier Remark, the qualitative moment lay in the determinateness of the powers; here it is the same as the infinitesimal, except only as a factor arithmetically related to product, or as point to line, line to plane, etc. The qualitative transition to be made from the discrete, into which the continuous magnitude is imagined to be resolved, to the continuous is now effected as a process of summing.

But that in fact the alleged mere summation contains in itself a multiplication, therefore the transition from the linear to the two-dimensional determination, appears in the simplest form in the way in which, for instance, it is shown that the area of a trapezium is equal to the product of the sum of the two opposite parallel lines and half the height. This **21.303**
height is represented as being only the *amount* of an aggregate of *discrete* magnitudes which must be summed up. These magnitudes are lines lying parallel between the two parallels limiting them. There are infinitely many of them, for they are supposed to make up the plane. And yet they are lines, and therefore, in order to be two-dimensional, they must at the same time be posited with negation. In order to escape the difficulty of a sum of lines supposedly yielding a plane, the lines are assumed as planes from the start but also as *infinitely thin*, for they derive their determination solely from the linear character of the parallel limits of the trapezium. As parallel and bounded by the other pair of rectilinear sides of the trapezium, they can

be represented as the terms of a uniformly differentiated but in principle indeterminate arithmetical progression whose first and last terms are the two limiting parallels. The sum of such a series, as we know, is the *product* of these parallels and half the *amount* of the terms. This last quantum is called "amount" simply and solely with reference to the representation of infinitely many lines; it is the determinateness as the magnitude in general of a *continuous* – the height. It is clear that what is called a "sum" is at the same time a *ductus lineæ in lineam*, the *multiplying* of the linear by the linear which is, according to the above determination,[148] the emergence of two-dimensionality. In the simplest case now of any rectangle in general, *a b*, each of the two factors is a simple magnitude; but already in the other still elementary example of the trapezium, only one factor is simple as one half of the height. The other factor is determined by a progression; it is still something linear, but its determinateness as magnitude is more complex; in so far as it can be expressed by a series, the task of summing it is called analytical, that is, arithmetical; but the geometrical moment in it is the multiplication, and this is the qualitative moment of transition from the dimension of line to that of plane; the one factor has been taken as *discrete* only for the arithmetical determination of the other; by itself, like the other, it is the magnitude of something linear.

But the method of representing planes as sums of lines is also commonly employed where no multiplication as such is being performed in view of the result. This is the case when the task is to give the magnitude in the equation not as quantum but as a proportion. There is, for instance, a well-known way of showing that the area of a circle bears the same relation to the area of an ellipse, the major axis of which is the diameter of the circle, as the major axis does to the minor axis, by taking each of these areas as the *sum* of the *ordinates* pertaining to it; each ordinate of the ellipse stands to the corresponding ordinate of the circle as the minor axis stands
21.304 to the major; therefore, it is concluded, also the *sums* of the ordinates, that is, *the areas*, *stand* in equal proportion. Those who would avoid in this connection the representation of areas or planes as a sum of lines resort to the usual, quite superfluous *ad hoc* aid of making the ordinates into *trapezia* of infinitely small width; since the equation is only a proportion, only one of the two linear elements of the area enters the comparison. The other element, the abscissa axis, is assumed equal in the ellipse and the circle – therefore, as a factor of arithmetical magnitude-determination, equal to 1 – and the proportion is, consequently, totally dependent only

[148] Cf. above, 21.301.

on the relation of the one determining moment. The two dimensions are necessary to the *representation* of a plane; the *determination of magnitude*, however, as is to be given in this proportion, extends only to the *one* moment. Therefore, to yield to the representation, or to try to improve it by adding the representation of *sum* to this *one* moment, is in truth a failure to recognize what mathematical determinateness is all about.

The foregoing discussion contains also the criterion for Cavalieri's method of indivisibles referred to above[149] – a method which the criterion also justifies and one that does not need the recourse to the infinitely small. These indivisibles are lines when Cavelieri considers a plane, or squares and circles when he considers a pyramid or a cone, etc. He calls the base line or base plane assumed as determined the *regula*; it is the constant and, with reference to a series, its first or last term; the indivisibles are regarded as parallel to it, therefore in equal determination with respect to the figure. Now Cavalieri's general fundamental proposition is that (*Exerc. Geometr*. VI; in the later work, *Exerc*. I, p. 6) "all figures, plane as well as solid, are *proportionate* to all their indivisibles, these being compared with each other collectively and, if there happens to be in them some common proportion, distributively."[150] For this purpose, he compares in figures of *equal* base line and height the proportions between the lines drawn parallel to the base and *equidistant* from it; all such lines of a figure have one and the same determination and constitute its whole content. In this way Cavalieri proves, for example, also the elementary proposition that parallelograms of equal height are proportional to their base; any two lines drawn in the two figures at equal distance from the base and parallel to it are in the same proportion as the bases, and so too, therefore, are the whole figures. In fact, the lines do not constitute the content of the figure as continuous **21.305** but constitute it only in so far as they are *arithmetically* determinable; the linear figure is the element of the content and through it alone must the determinateness of the latter be grasped.

With this we are led to reflect on a difference regarding where to place the *determinateness* of a figure, whether it is constructed, like the *height* of the figure here, or whether it is the *external limit*. In so far as it is an *external limit*, then one concedes that the *continuity* of the figure *follows upon*, so to speak, the equality or the proportion of the limit; e.g. the equality of *congruent* figures rests on the fact that the boundaries, the limiting lines, coincide. But in parallelograms of equal height and base, only this last determinateness is an external limit; the height on which the *second main*

[149] Cf. above, 21.253. [150] Cavalieri, *Exercitationes geometricæ sex* (1647), p. 6.

determination of the figures rests, the *proportion* of the two, and not the *parallelism* as such, brings a second principle of determination to the external limits. Euclid's proof of the equality of parallelograms that have the same height and base reduces them to triangles, to *externally limited* continuous figures. In Cavalieri's proof, first of all concerning the proportionality of parallelograms, the limit is simply a *determinateness of magnitude as such*, which is explicated as taken at every pair of lines drawn at the same distance from each other in both figures. These lines, equal or in equal proportion to the base, taken *collectively*, yield the figures that stand in equal proportion. The image of an *aggregate* of lines is incompatible with the continuity of the figure; consideration of the lines alone fully exhausts the determinateness which is at issue. Cavalieri has a standard reply to the supposed difficulty, that the representation of indivisibles requires the comparison of lines or planes which are infinite in *number* (*Geom. Lib. II*, Prop. I, schol.).[151] He rightly points out that he is not comparing the *number* of such lines or planes, which we do not know (that is, it is rather an empty representation, as just remarked,[152] introduced as prop), but only the *magnitude*, that is, the quantitative determinateness as such which is equal to the space occupied by these lines; because this space is enclosed within limits, its magnitude is also enclosed within these limits; *the continuous is nothing other than the indivisibles themselves*, he says; if it were anything *apart from them*, it would not be comparable; but it would be absurd to say that bounded continuous figures are not comparable with each other.

One can see that Cavalieri's intention is to distinguish what belongs to the *external existence* of the continuous from that in which its *deter-*
21.306 *minateness* lies and which alone must be stressed when comparing it or devising theorems about it. The categories which he used for this purpose, namely the continuous as *composed of*, or *consisting in*, indivisibles, and the like, are admittedly not satisfactory, for implied in them is the claim to an intuition of the continuous or, as already said, of its external existence; instead of saying "that the continuous is nothing other than the indivisibles themselves,"[153] it would have been more correct to say, and consequently also self-explanatory, that the determinateness of the magnitude of the continuous is none other than that of the indivisibles themselves. – Cavalieri is not comfortable with the dubious consequence drawn *by the schools* from the representation of the continuous as made up of indivisibles, namely that there is a greater and smaller infinite; he expressly states further in the

[151] See Cavalieri, *Geometria indivisibilibus continuorum nova* (1635). Book 2, Proposition 1, scholium.
[152] Cf. above, 21.304. [153] Cf. 21.305, note 151 above.

treatise (*Geom. Lib. VII*, Pref.)[154] that he is in no way forced by his method of proof to represent the continuous as made up of indivisibles; *continuous figures only follow the proportion of the indivisibles*. He says that he did not take up the aggregate of indivisibles in the way they seem to end up in the determination of the infinite, for the sake of an *infinite heap* of lines or planes; he took them rather because of the way they are *constituted*, *for the specific nature* of limitedness that they have in them. Nevertheless, in order to remove this stumbling block, he does not spare himself the trouble of demonstrating the main propositions of his geometry, in the seventh book specially added for this purpose, in a way that remains free of any admixture of infinity. – This way reduces the proofs to the just cited usual form of *congruence* of figures, that is, as we remarked, to the representation of determinateness as *external spatial limit*.[155]

A further remark that can be made here concerning this form of congruence is that it is no more than, so to speak, a childish aid for the intuition of the senses. In the elementary propositions concerning the triangles, two such triangles are represented side by side; on the assumption that, of the six parts of each, three in the one triangle are equal to the corresponding three in the other, it is shown that the two triangles are congruent, that is, that in each the remaining three parts are equal to the corresponding remaining three in the other – because by virtue of the equality of the first three parts the two triangles *cover each other*. In more abstract terms, all that this equality of corresponding pairs of parts in the two triangles amounts to is that there is just *one single triangle* in which three parts are assumed as *already determined*, whence follows the *determinateness* of the remaining three parts. The *determinateness* of the one triangle is thus demonstrated to be *completed* with the three parts assumed; for the determinateness as **21.307**
such the remaining three parts are therefore a *superfluity – the superfluity of sensible existence*, that is, of the intuition of continuity. When the matter is expressed in these terms, the qualitative determinateness stands out in its distinction from what is given to intuition, from the whole as continuous in itself; *congruity* does not let this distinction show through.

As we have observed,[156] a new circumstance comes into play in the case of parallel lines and parallelograms: on the one hand the equality of the angles only, and on the other the height of the figures from which the external limits of the latter (the sides of the parallelograms) are distinct. There is an ambiguity here as to whether in these figures, besides the determinateness of the side which is one external limit, the base, we should take as the *other*

[154] Ibid. [155] Cf. above, 21.305. [156] Cf. above, 21.304.

external limit the other side of the parallelogram or the height instead. In the case of two parallelograms that have the same base and height, but one is rectangular whereas the other has two angles sharply acute and the opposite two very obtuse accordingly, intuitively the latter figure can easily appear greater than the former, for intuitively its given longer side is taken to be the *determinant* one and, as in Cavalieri's figurative method, the *planes* are compared according to the *aggregate* of parallel lines intersecting them; the *longer* side could be seen as offering the possibility of *more* lines than the vertical side of the rectangle does. This intuitive ambiguity, however, is no argument against Cavalieri's method, for the *aggregate* of parallel lines imagined in the two parallelograms for the purpose of comparison equally presupposes *the equidistance* of the lines from each other or from the base, from which it follows that the height, and not the other side of the parallelogram, is the *other determining moment*. The situation changes again, however, when the two parallelograms being compared are of equal height and equal base but do not lie on one plane and make different angles with a third plane. Here the parallel cross-sections that arise when the third plane is imagined cutting across the parallelograms in parallel motions are no longer equidistant from each other and the two planes are unequal. Cavalieri is very careful to call attention to this difference which he defines as one between *transitus rectus* and *transitus obliquus* of the indivisibles (in *Exercit.* I, n. XIIff., and already in *Geometr*. 1.II),[157] thus staying at the source any superficial misunderstanding which could arise at this juncture. I remember Barrow citing in his above mentioned work (*Lect. Geom*. II, p. 21)[158] an objection of Taquet[159] – an astute geometer who was also working at this time on new methods – bearing on precisely this subject.
21.308 This Barrow is the one who also used the method of the indivisibles, though already adulterated by the assumption (which he passed on to his pupil Newton and to other contemporary mathematicians, Leibniz included) that a curvilinear triangle, like the so-called characteristic triangle, and a rectilinear triangle can be said to be equal if both are infinite, that is, *very* small. The difficulty raised by Taquet likewise concerns the question of which line, in the calculation of conic and spherical surfaces, should be taken as the *determining factor* in a method based on the application of the discrete. Taquet's objection to the method of the indivisibles is that in the calculation of conic and spheric surfaces, the triangle of the cone is represented according to this atomistic method as made up of straight

[157] See Cavalieri, *Exercitationes geometricæ sex*, §§15–17. [158] Cf. above, 21.284.
[159] Andrew Taquet (1611–1660), Jesuit mathematician at Antwerp.

lines, parallel to the base and perpendicular to the axis, which are at the same time the *radii of the circles* of which the *surface* of the cone consists. If now this surface is defined as the sum of the circumferences, and this sum is determined from the number of the radii of these circumferences, that is, from the length of the axis and the height of the cone, then such a result would contradict the truth which Archimedes has taught and demonstrated. To this objection of Taquet, Barrow's response is that, for determining the surface, it is not the axis but the *side* of the triangle of the cone that must be taken as the line the revolution of which generates the surface, and this line – not the axis – must therefore be taken as determining the magnitude for the aggregate of the circumferences.

Objections or uncertainties of this kind have their origin solely in the vagueness of the representation used for the *infinite* aggregate of points of which the line, or of lines of which the plane, etc., supposedly consists; it is this representation which obscures the essence of the determinateness, whether of the lines or the planes. – It was the aim of these Remarks to bring attention to the *affirmative* determinations of the category of the infinitesimal which, in the various uses made of this category in mathematics, remain in the background so to speak, and to extract them from the nebulosity in which they are shrouded when that category is kept at a merely negative level of determination. In infinite series, as in Archimedes' cyclometry, the infinite means no more than that, if the law of the progression of the series is known, but the so-called *finite*, that is, the arithmetical expression, is not given, the reduction of the arc to the straight line cannot be carried out; this incommensurability is their qualitative difference. Likewise the qualitative difference between the discrete and the continuous contains in general a **21.309**
negative determination which makes them appear incommensurable: it thus introduces the infinite, in the sense that the continuous which is now to be taken as discrete no longer is supposed to have, as continuous, any quantum. The continuous, which arithmetically is to be taken as *product*, is thereby posited as discrete in itself, that is to say, is broken down into the elements which are its factors; its magnitude-determinateness lies in these factors, and they, precisely by virtue of being factors or elements, are of a lower dimension and, as the determinateness of power goes, of a lower power than the magnitude of which they are the elements or factors. This difference appears arithmetically as merely quantitative, a difference of the root or the power, of whatever degree they might be; however, if the expression does not go further than just the quantitative sphere as such (for example, $a : a^2$ or $da^2 = 2a : a^2 = 2 : a$; or for the law of gravity, $t : at^2$), it then yields the ratios $1 : a$, $2 : a$, $1 : at$, which say nothing

whatsoever; as against their merely quantitative determination, the sides would have to be held apart by the qualitative meaning differentiating them, as $s : at^2$, the magnitude being thereby spoken of as a quality, as a function of the magnitude of another quality. Here then, we are only conscious of the quantitative determinateness, and it is easy enough, in its own way, to operate with it. Nor is there anything terrible in multiplying the magnitude of a line by the magnitude of another line. However, the multiplication of these magnitudes yields at the same time the qualitative alteration of the transition of line into plane, and to this extent a negative determination comes into play. It is this determination that occasions the difficulty, a difficulty which can be resolved by an insight into its peculiarity and the simple nature of the matter, but which, when the attempt is made to eliminate it by the aid of the infinite, only degenerates unresolved into confusion.

CHAPTER 3

Ratio or the quantitative relation[160]

21.310

The infinity of quantum has been determined up to the point where it is the negative beyond of quantum, a beyond which quantum, however, has within it. This beyond is the qualitative moment in general. The infinite quantum, as the unity of the two moments, of the quantitative and the qualitative determinateness, is in the first instance *ratio*.

In ratio, quantum no longer has a merely indifferent determinateness but is qualitatively determined as simply referring to its beyond. It continues in its beyond, and this beyond is at first just an *other* quantum. Essentially, however, the two do not refer to each other as external quanta but *each rather possesses its determinateness in this reference to the other*. In this, in their otherness, they have thus returned into themselves; what each is, that it is in its other; the other constitutes the determinateness of each. – The quantum's self-transcendence does not now mean, therefore, that quantum has simply changed either into some other or into its abstract other, into its abstract beyond, but that there, in the other, it has attained its determinateness; in its other, which is an other quantum, it finds *itself*. The *quality* of quantum, its conceptual determinateness, is its externality as such, and in ratio quantum is now *posited* as having its determinateness in this externality, in another quantum – as being in its beyond what it is.

It is quanta that stand to each other in the connection that has now come on the scene. This *connection* is itself also a magnitude; quantum is not only *in relation*, but *is itself posited as relation*; it is *a* quantum as such that has **21.311** that qualitative determinateness *in itself*. So, as relation (as ratio), quantum gives expression to itself as self-enclosed totality and to its indifference to limit by containing the externality of its being-determined in itself: in this externality it is only referred back to itself and is thus infinite within.

Ratio in general is:

1. *direct* ratio. In this, the *qualitative* moment does not yet emerge explicitly as such; in no other way except still as quantum is quantum posited

[160] *das quantitative Verhältnis.*

as having its determinateness in its externality. – In itself, however, the quantitative relation is the contradiction of externality and self-reference, the persistence of quanta and their negation. Such a contradiction next sublates itself:

2. first inasmuch as in *indirect* or *inverse* ratio the *negation* of each of the quanta is as such co-posited in the alteration of the other, and the variability of the direct ratio is itself posited;
3. but in the *ratio of powers*, the unity, which in its difference refers back to itself, proves to be a simple self-production of the quantum; this qualitative moment itself, finally posited in a simple determination and as identical with the quantum, becomes *measure*.

– About the nature of the following ratios, much was anticipated in the preceding remarks concerning the infinity of quantity, that is, the qualitative moment in it; it only remains to analyze, therefore, the abstract concept of this ratio.

A. THE DIRECT RATIO

1. In the ratio which, as immediate, is *direct*, the determinateness of each quantum lies in the reciprocal determinateness of the other. There is only
21.312 *one determinateness* or limit of both – one which is itself a quantum, namely the *exponent* of the ratio.

2. The exponent is some quantum or other; however, in referring *itself to itself* in the *otherness* which it has within it, it is only a qualitatively determined quantum, for its difference, its beyond and otherness, is in it. This difference *in* the quantum is the difference of *unit* and *amount* – the unit, which is the being-determined-for-itself; the amount, which is the indifferent fluctuation of determinateness, the external indifference of quantum. Unit and amount were at first the moments of quantum; now, in the ratio, in quantum as realized so far, each of its moments appears as a quantum *on its own* and as determinations of the existence of the quantum, as delimitations against the otherwise external, indifferent determinateness of magnitude.

The exponent is this difference as simple determinateness, that is, it has the meaning of both determinations immediately in it. *First*, it is a quantum and thus an amount. If the one side of the ratio which is taken as unit is expressed in a numerical one, and has only the value of one, then the other, the amount, is the quantum of the exponent itself. *Second*, it is simple determinateness as the qualitative moment of the sides of the ratio. When the quantum of the one side is determined, the other is also determined

by the exponent and it is a matter of total indifference how the first is determined; it no longer has any meaning as a quantum determined for itself but can just as well be any other quantum without thereby altering the determinateness of the ratio, which rests solely on the exponent. The one side which is taken as unit always remains unit however great it becomes, and the other, however great it too thereby becomes, must remain the *same* amount of that unit. **21.313**

3. Accordingly, the two truly constitute only *one* quantum; the one side has only the value of unit with respect to the other, not of an amount; and the other only that of amount. *According to their conceptual determinateness*, therefore, they are themselves *not complete* quanta. But this incompleteness is in them a negation, and it is so not because of their general variability, according to which one of them (any of the two) can assume all possible magnitudes, but because they are so determined that, as one is altered, the other is increased or decreased in corresponding measure. This means that, as indicated, only *one* of them, the unit, is altered as quantum; the other side, the amount, remains the same quantum *of units*, and the first side too retains the *value* of a unit, however much it is altered as quantum. Each side is thus only one of the two moments of quantum, and the self-subsistence which is their proper characteristic is in principle *negated*; in this qualitative combination they are to be posited as *negative* with respect to each other.

The exponent ought to be the complete quantum, since the determinations of *both* sides come together in it; but in fact, even as quotient the exponent only has the value of *amount*, or of *unit*. There is nothing available for determining which of the two sides of the relation would have to be taken as the unit or as the amount; if one side, quantum B, is measured against quantum A as unit, then the quotient C is the amount of such units; but if A is itself taken as amount, the quotient C is the unit which is required by the amount A for the quantum B. As exponent, therefore, this quotient is not posited for what it ought to be, namely the determinant of the ratio, or the ratio's qualitative unity. It is posited as such only to the extent that its value is that of the *unity of the two moments*, of unit and amount. And since these two sides, as quanta, are indeed present as they should be in the explicated quantum, in the ratio, but at the same time have the value, which is specific to them as the sides of the ratio, of being *incomplete* quanta and of counting only as one of those qualitative moments, they are to be posited with this negation qualifying them. Thus there arises a more real ratio, one more in accordance with its definition, one in which the exponent has the meaning of the product of the sides. In this determinateness, it is the *inverse* ratio. **21.314**

B. THE INVERSE RATIO

1. The ratio as now before us is the *sublated* direct ratio. It was an *immediate* relation and therefore not yet truly determinate; henceforth, the newly introduced determinateness gives the exponent the value of a product, the unity of unit and amount. In immediacy, as we have just seen, it was possible for the exponent to be indifferently taken as unit or amount. Moreover, it also was only a quantum in general and therefore an amount by choice. One side was the unit, and this was to be taken as a numerical one with respect to which the other side would be a fixed amount and at the same time the exponent. The quality of the latter, therefore, was only that this quantum is taken as fixed, or rather that the constant only has the meaning of quantum.

Now in the inverse ratio, the exponent is as quantum likewise immediate, a quantum or other which is assumed as fixed. But to the *one* of the other quantum *in the ratio*, this quantum is not a *fixed amount*; the ratio, previously taken as fixed, is now posited instead as alterable; if another quantum is taken as the unit of the one side, the other side now no longer remains the *same amount* of units of the first side. In direct ratio, this unit is only the common element of both sides; as such, it continues into the other side, the amount; the amount itself, or the exponent, is by itself indifferent to the unit.

But as the determinateness of the ratio now is, the amount as such alters relative to the unit with respect to which it makes up the other side of the ratio; whenever another quantum is taken as the *unit*, that amount alters. Consequently, although the exponent is still only an immediate quantum and only arbitrarily assumed as fixed, it does not remain fixed in the side of the ratio: rather this side, and with it the direct ratio of the sides, is alterable. In the ratio now before us, the exponent as the determining quantum is thus posited as negative towards itself as a quantum of the ratio, and hence as qualitative, as limit; the result is that the qualitative moment distinctly comes to the fore for itself as against the quantitative moment. – In the direct ratio, the *alteration* of the two sides is only the one alteration of the quantum from which the unity which is the common element is taken; by as much, therefore, as the one side is increased or decreased, so also is the other; the ratio itself is indifferent to this alteration and the alteration external to the ratio. In the indirect ratio, on the contrary, although still arbitrary
21.315 according to the moment of quantitative indifference, the alteration is contained *within* the ratio, and its arbitrary quantitative extension is limited by the negative determinateness of the exponent as by a limit.

2. We must now consider this qualitative nature of the indirect ratio more closely, as it is realized, and sort out the entanglement of the affirmative and the negative moments that are contained in it. – Quantum is posited as being quantum qualitatively, that is, as self-determining, as displaying its limit within it. Accordingly, *first*, it is an immediate magnitude as *simple* determinateness; it is the *whole* as *existent*, an affirmative quantum. But, *second*, this immediate *determinateness* is at the same time *limit*; for that purpose it is distinguished into two quanta which are at first the other of each other; but as the qualitative determinateness of these quanta, and as a determinateness which is moreover complete, quantum is the unity of the unit and the amount, a product of which the two are the factors. Thus on the one hand the exponent of their ratio is in them identical with itself and is their affirmative moment by which they are quanta; on the other hand, as the negation posited in them, it is in them the unity according to which each, at first an immediate and limited quantum in general, is at the same time so limited as to be only *implicitly in itself identical* with its other. *Third*, the exponent as the simple determinateness is the negative unity of this differentiation of it into the two quanta, and the limit of their reciprocal limiting.

In accordance with these determinations, the two moments *limit* themselves inside the exponent and each is the negative of the other, for the exponent is their determinate unity; the one moment becomes as many times smaller as the other becomes greater; each possesses a magnitude of its own to the extent that this magnitude is in it that of their other, that is, is the magnitude that the other lacks. The magnitude of each in this way continues into the other *negatively*; how much it is in amount, that much it sublates in the other as amount and is what it is only through this negation or limit which is posited in it by the other. In this way, each *contains* the other as well, and is proportioned to it, for each is supposed to be only that quantum which the other is not; the magnitude of the other is indispensable to the value of each, and therefore inseparable from it.

This continuity of each in the other constitutes the moment of *unity* through which the two magnitudes stand in relation – the moment of the *one* determinateness, of the simple limit which is the exponent. This unity, the whole, constitutes the *in-itself* of each from which their *given* magnitude is distinct: this is the magnitude according to which each is only to the extent that it takes from the other a part of their common in-itself which is the whole. But each can take from the other only as much as will make it equal to this in-itself; it has its maximum in the exponent

21.316 which, in accordance with the stated second determination, is the limit of the reciprocal delimitation. And since each is a moment of the ratio only to the extent that it limits the other and is thereby limited by it, it loses this, its determination, by making itself equal to its in-itself; in this loss, the other magnitude will not only become a zero, but itself vanishes, for what it ought to be is not just a quantum but what it is as such a quantum, namely only the moment of a ratio. Thus each side is the contradiction between the determination as its in-itself, that is, as the unity of the whole which is the exponent, and the determination as the moment of a ratio; this contradiction is *infinity* again, in a new form peculiar to it.

The exponent is the *limit* of the sides of its ratio, within which limit the sides increase and decrease proportionately to each other; but they cannot become equal to this exponent because of the latter's affirmative determinateness as quantum. Thus, as the limit of their reciprocal limiting, the exponent is (α) their *beyond* which they *infinitely* approximate but can never attain. This infinity in which the sides approximate their beyond is the bad infinity of the infinite progression; it is an infinity which is itself finite, that finds its restriction in its opposite, in the finitude of each side and of the exponent itself, and for this reason is only *approximation*. But (β) the bad infinite is equally *posited* here as what it is *in truth*, namely the *negative moment* in general, in accordance with which the exponent is the *simple limit* as against the distinct quanta of the ratio: it is the in-itself to which, as the absolutely alterable, the finitude of the quanta is referred, but which, as the quanta's negation, remains absolutely different from them. This infinite, which the quanta can only approximate, is then equally found *affirmatively* present *on their side*: the simple quantum of the exponent. In it is attained the beyond with which the sides of the ratio are burdened; it is *in itself* the unity of the two or, consequently, in itself the other side of each side; for each side has only as much value as the other does not have; its whole determinateness thus rests in the other, and this, their being-in-itself, is as affirmative infinity simply the exponent.

3. With this, however, we have the transition of the inverse ratio into a determination other than the one it had at first. This consisted in the
21.317 fact that the quantum is immediate but at the same time so connected to an other that the greater it is, the smaller is the other, that it is what it is by virtue of negatively relating to the other; also, a third magnitude is the common restriction on this alteration in magnitude that the two quanta undergo. This reciprocal alteration, as contrasted to the *fixed* qualitative

limit, is here their distinctive property; they have the determination of *alterable* magnitudes for which that fixed limit is an infinite beyond.

But the determinations that have emerged and which we now have to sum up are not only that this infinite beyond is at the same time some present finite quantum or other, but that its fixity – which makes it with respect to the quantitative moment the infinite beyond that it is, and which is the qualitative moment of being only as abstract self-reference – has developed itself as a mediation of itself with itself in its other, the finite moments of the relation. The general point is that the whole is as such the limit of the reciprocal limiting of the two terms, and that the *negation of the negation* (and consequently infinity, the *affirmative* self-relation) is therefore posited. The more particular point is that, as product, the exponent already *implicitly* is already the unity of unit and amount, whereas each of these two terms is only one of two moments, and for this reason the exponent encloses them in itself and in them it *implicitly* refers itself to itself. But in the inverse ratio the difference has developed into the *externality* of quantitative being, and the qualitative being is not only something fixed, nor does it simply enclose the two moments of the ratio immediately in it, but in the *externally existent otherness* it *rejoins itself*. It is this determination that stands out as a result in the moments we have seen. The exponent, namely, is found to be the implicit being whose moments are realized in quanta and in their generalized alterability. The indifference of the magnitudes of these moments in the course of their alteration displays itself as an infinite progression, the basis of which is that in their indifference their determinateness is to have their value each in the value of the other. Thus, (α) according to the affirmative side of their quantum, the determinateness of the moments is that each is *in itself* the whole of the exponent; equally, (β) they have the magnitude of the exponent for their negative moment, for their reciprocal limiting; their limit is that of the exponent. The fact that such moments do not have any other immanent limit, any fixed immediacy, is posited in the infinite progression of their existence and in their limitation, in the negation of every particular value. This is, accordingly, the *negation* of the externality of the exponent which is displayed in them, and the exponent – itself equally a quantum as such and also expanded into quanta – is thereby **21.318** posited as preserving itself in the negation of the indifferent subsistence of the moments, as rejoining itself, and thus as the determining factor in this movement of self-surpassing.

The ratio is hereby determined as the *ratio of powers*.

C. THE RATIO OF POWERS

1. Quantum, in positing itself as self-identical in its otherness and in determining its own movement of self-surpassing, has come to be a being-for-itself. As such a qualitative totality, in positing itself as developed, it has for its moments the conceptual determinations of number: the unit and the amount. This last, amount, is in the inverse ratio still an aggregate which is not determined as amount by the unit itself but from elsewhere, by a third determinate aggregate; but now it is posited as determined only by the unit. This is the case in the ratio of powers where the unit, which in it is amount, is at the same time the amount as against itself as unit. The otherness, the amount of units, is the *unit* itself. The power is an aggregate of units, each of which is this aggregate itself. The quantum, as indifferent determinateness, changes; but inasmuch as the alteration is the raising to a power, the otherness of the quantum is determined purely by itself. – The quantum is thus posited in the power as having returned into itself; it is immediately itself and also its otherness.

The *exponent* of this ratio is no longer an immediate quantum, as in the direct ratio and also in the inverse ratio. In the ratio of powers, the exponent is of an entirely *qualitative* nature; it is this *simple* determinateness: that the amount is the unit itself, that the quantum is self-*identical* in its otherness. And the side of its *quantitative* nature is to be found in this: that the limit or
21.319 negation is not an immediate existent, but that existence is posited rather as continuing in its otherness. For the truth of quality is precisely to be quantity, or immediate determinateness as sublated.

2. The ratio of powers appears at first as an external alteration to which a given quantum is subjected; but it has a closer connection with the *concept* of quantum, namely, that in the existence into which the quantum has developed in the ratio of powers, quantum has attained that concept, has realized its concept to the fullest. The ratio of powers is the display of what the quantum is *implicitly in itself*; it expresses its determinateness of quantum or the *quality* by which it is distinguished from another. Quantum is *indifferent* determinateness *posited as sublated*, that is to say, determinateness as limit, one which is just as much no determinateness, which continues in its otherness and in it, therefore, remains identical with itself. Thus is quantum *posited* in the ratio of powers: its otherness, the surpassing of itself in another quantum, as determined through the quantum itself.

If we compare the progressive realization of quantum in the preceding ratios, we find that quantum's quality of being the difference of itself from

itself is simply this: that it is a ratio. As the direct ratio, quantum is this posited difference only in the first instance or immediately, so that the self-reference which it has as exponent, in contrast to its differences, counts only as the fixity of an amount of the unit. In the inverse ratio, as negatively determined, quantum is a relating of itself to itself (to itself as to its negation in which, however, it has its value); as an affirmative self-reference, it is an exponent which, as quantum, is only *implicitly in itself* the determinant of its moments. But in the ratio of powers quantum is present in the difference **21.320**
as a difference *of itself from itself*. This *externality* of determinateness is the quality of quantum and is thus posited, in conformity to the concept of quantum, as quantum's own determining, *as* its reference to itself, its *quality*.

3. By being thus *posited* as it is in conformity to its concept, quantum has passed over into another determination; or, as we can also say, its *determination* is now also as the *determinateness*, the *in-itself* also as *existence*. It is *quantum* in so far as the externality or the indifference of its determining (as we say, it is that which can be increased or decreased) is *simply* accepted and *immediately* posited; it has become the other of itself, namely quality, in so far as that same externality is now posited as mediated by quantum itself and hence as a moment of quantum, so that *in that very externality* quantum *refers itself to itself* – is being as quality.

At first quantity as such thus appears in opposition to quality; but quantity is itself *a* quality, self-referring determinateness as such, distinct from the determinateness which is its other, from quality as such. Except that quantity is not only *a* quality, but the truth of quality itself is quantity, and quality has demonstrated itself as passing over into it. Quantity, in its truth, is instead the externality which has returned into itself, which is no longer indifferent. Thus is quantity quality itself, in such a way that outside this determination quality as such would yet not be anything at all. – For the totality to be *posited*, a *double* transition is required, not only the transition of one determinateness into the other, but equally the transition of this other into the first, its going back into it. Through the first transition, the identity of the two is present at first only *in itself*: quality is contained in quantity, but the latter still is only a one-sided determinateness. Conversely, that quantity is equally contained in quality, that it is equally also only as sublated, this results in the second transition, the going back into the first determinateness. This remark regarding the necessity of the *double* transition is everywhere of great importance for scientific method.

Quantum is henceforth no longer an indifferent or external determination but is sublated as such, and it is a quality and that by virtue of which
21.321 anything is what it is; the truth of quantum is to be *measure*.

Remark

We explained above, in the Remarks concerning the quantitative infinite,[161] that the difficulties associated with it have their origin in the *qualitative* moment that asserts itself in the sphere of the quantitative. We also explained how it is the qualitative moment of the ratio of powers which is particularly involved in a multitude of new starts and false starts; and we showed that the failure which chiefly stands in the way of a grasp of the concept of this infinite is that one stops short at just its negative determination as the negation of quantum, and fails to proceed to its simple affirmative determination as qualitative. – We now have only one more remark left to make. It concerns the intrusion of quantitative forms into the pure qualitative forms of thought that has occurred in philosophy. The ratio of powers especially has recently been applied to *conceptual determinations*. Thus the concept has been called "the *first* power" in its immediacy; "the *second* power" in its otherness or difference, in the existence of its moments; and "the *third* power" in its turning back to itself or as totality.[162] – It immediately occurs against this usage that *power*, as so used, is a category that essentially belongs to quantum and has no conceptual connection to the *potentia*, δύναμις, of Aristotle. The ratio of powers indeed expresses determinateness in the truth that it has attained as difference – but difference as found *in the particular concept* of quantum, not as it is in the concept as such. Quantum contains the negativity that belongs to the nature of the concept but not as in any way already posited in the determination which is specific to it; so far as the concept is concerned, the differences of quantum are superficial determinations; they are still far from being determined as they are in the concept. It was in the infancy of philosophical thinking that numbers were used, as by Pythagoras, to designate universal essential differences, and for this purpose, *first* power, *second* power, etc., have no advantage over numbers. This was a preliminary stage in the process of comprehension by pure thought; only after Pythagoras were the determinations of thought themselves discovered, that is, they were *explicitly* brought to consciousness. But to step back in this
21.322 process to number determinations is the symptom of a thought that senses

[161] These are the remarks at the end of the preceding chapter.
[162] Hegel is clearly referring to Schelling and his disciples, and to Bardili as well.

its incapacity and, in an effort to stand up to the contemporary philosophical culture which is accustomed to thought determinations, now adds the comedy of pretending that its weakness is something new and superior, a step forward.

There is nothing much to be said against the *symbolic* use of the language of "power," no more than there is against the use of numbers or any other kind of symbols for concepts. But there is also everything to be said against it as there is against any system of symbols that pretends to convey pure conceptual or philosophical determinations. Philosophy has no need of any such aid, either from the world of the senses, or from the representations of the imagination, or also from spheres which belong to its own realm but are subordinated, and whose determinations are therefore unsuited to higher circles and to the whole. This last is universally the case when the categories of finitude are applied to the infinite; the common determinations of force, or substantiality, cause and effect, and so on, are likewise only symbols when expressing, for instance, living or spiritual relations; that is, they are to them untrue determinations, and all the less true to them, or to speculative relations in general, are the quantum powers or the numerical powers. – If one is to use numbers, powers, the mathematical infinite, and the like, not as symbols but as forms of philosophical determinations and consequently as themselves philosophical forms, then one must start by defining their philosophical meaning, that is, their conceptual determinateness. But the moment this is done, they become superfluous designations, for the determinateness of the concept is its own designation, and this alone is the one which is both correct and fitting. The use of those forms is, therefore, nothing more than a convenient means for sparing oneself the task of grasping the determinations of the concept, of specifying and justifying them.

SECTION III

21.323

Measure

Abstractly expressed, quality and quantity are in measure united. *Being* as such is the immediate equality of determinateness with itself. This immediacy of determinateness has sublated itself. Quantity is being that has returned to itself in such a way that it is a simple self-equality indifferent to determinateness. But this indifference is only the externality of having the determinateness not in itself but in an other. As third, we now have the externality that refers itself to itself; as self-reference, it is at the same time *sublated* externality and carries the difference from itself in it – a difference which, as externality, is the *quantitative* moment, and, as taken back into itself, the *qualitative*.

Since among the categories of transcendental idealism *modality* comes after quantity and quality, with relation inserted in between,[1] this is an appropriate place to say something about it. In transcendental idealism, this category has the meaning that it is the connection of the *subject matter* to *thought*. As understood by that idealism, thought is as such essentially external to the thing-in-itself. Hence, inasmuch as the other categories have the transcendental determination of belonging only to consciousness, but as *its objective moment*, so modality, which is the category of the connection to the subject, possesses the determination of *reflection* in itself in a relative
21.324 sense,[2] that is to say, the objectivity which is granted to the other categories is lacking in those of modality; these, according to Kant's words, do not add

[1] A80/B109.

[2] *relativ*. One sentence in the 1812 edition of this introduction to "measure" which is not included in the present, otherwise much enlarged 1832 version of the same text may help to explain Hegel's meaning. "On one side here [of thought], only pure externality is contained, for the connection to thought which could be the moment of reflection into itself is here rather the externality itself" (11, 189.17–20). That is to say, in Transcendental Idealism the return of thought from the subject matter (*Gegenstand*) back to itself which would constitute its truth is only relative, i.e. still subjective, for the object from which the return is made remains an empty externality which is indicated only at a distance. The objectivity (*Objectivität*) attained is still subjective. In this respect, there is an affinity between Transcendental Idealism and Spinoza's thought which Hegel then goes on to consider.

in the least to the concept as a determination of the object but only express its relation to the faculty of cognition (*Cr. of Pure R.*, 2nd edn, pp. 99, 266).[3] – The categories which Kant groups under modality – possibility, actuality, and necessity – will come up later in their proper place.[4] Kant did not apply the form of triplicity – an infinitely important form even though with him it occurred only as a formal spark of light – to the genera of his categories (to quantity, quality, etc.), but only to their species to which he also gave the name of genera. He was therefore unable to hit upon the third to quality and quantity.

With Spinoza, the *mode* is likewise the third after substance and attribute;[5] Spinoza defines it as the *affections* of substance, or as that which is in another through which it is also comprehended. In this way of conceiving it, this third is externality as such; as has already been mentioned,[6] with Spinoza generally, the rigidity of substance lacks the turning back into itself.

The remark just made extends to any of the systems of pantheism which thought has in one way or other produced. Being, the one, substance, the infinite, essence, is the first; opposite this abstraction is the second which can be mustered in an equally abstract form, as is habitually done as the next step in any purely formalistic thinking, namely all determinateness generally taken as the mere finite, the mere accidental, the transitory, the extraneous and unessential, etc. But the bond connecting this second with the first is too invasive for the second not to be not equally grasped with the first; thus with Spinoza the *attribute* is the whole of substance, though as comprehended by the understanding, which is itself a restriction of substance or mode; and so the mode, the insubstantial as such which can be grasped only through an other, constitutes the opposite extreme of substance, the third. Also Indian pantheism, taken abstractly, has attained in its monstrous fantasies this refinement which runs like a moderating thread across its excesses as its one point of interest – namely that Brahma, the one of abstract thought, progresses through the shape of Vishnu, particularly in the form of Krishna, to the third, Shiva. The determination of this third is that of mode, alteration, coming-to-be and passing-away; it is the field of externality in general. This Indian trinity has tempted a comparison with the Christian, and one must indeed acknowledge a common element in them. But it is essential to be aware of the difference **21.325**

[3] A74/B99; A219/B266ff. [4] Cf. 11.389ff., below.
[5] Cf. *Ethics*, Definition IV which follows after the definition of "substance" and "attribute." English trans., p. 45.
[6] Cf. above, 21.247.

that separates them. It is not just that this difference is infinite but that the true infinity makes the difference. The determination of the Indian third principle is that it is the dispersal of the substantial unity into its opposite, *not its turning back* to itself – a spiritual void rather, not spirit. In the true trinity, there is not only unity but unification; the syllogism is brought to a unity which is *full of content* and *actual*, a unity which in its totally concrete determination is *spirit*. The principle of the mode and of alteration does not, of course, exclude unity altogether. In Spinozism, for instance, precisely the mode is as such untrue while substance alone is what truly is; everything is supposed to be reduced to substance, and this is then a sinking of all content into an only formal unity void of content. As for Shiva, it too is again the great whole, not distinct from Brahma, from Brahma itself, that is, the distinction and the determinateness just disappear without being preserved, without being sublated, and the unity does not become concrete unity, nor is the diremption reconciled. The supreme goal of the human being, relegated as he is to the sphere of coming-to-be and passing-away, of modality in general, is to sink into unconsciousness, into unity with Brahma, annihilation; the Buddhist Nirvana, Nibbana, etc., is the same.

Now although the mode is as such abstract externality, indifference to qualitative as well as quantitative determinations, and nothing in the essence should depend on the external, the unessential, it is nevertheless conceded that in the many all depends on the *how*;[7] but this is to concede that the mode itself essentially belongs to the substance of a thing, a very indefinite connection but one which at least implies that the externality of the mode is not all that abstract an externality after all.[8]

Here the mode has the definite meaning of being *measure*. The Spinozistic mode, just like the Indian principle of alteration, is the measureless. The Greeks were aware that *everything has a measure*. Parmenides himself introduces *necessity* after abstract being, as the *ancient limit which is imposed on all*.[9] And this awareness, although still vague, is the beginning of a much higher concept than is contained in substance and in the distinction of the mode from it. –

Measure in its more developed, more reflected form is necessity. Fate, Nemesis, ultimately comes down to a determination of measure. Whatever

[7] *Art und Weise*: both *Art* and *Weise* can be translations of the Latin *modus* or "mode."

[8] This paragraph does not appear in the 1812 edition. It is part of the much enlarged 1832 text. It is especially important because it signals a clarification in Hegel's own mind regarding the new objective meaning that the modal categories assume when "measure" is understood as a yet undeveloped form of "mode." See the translator's Introduction.

[9] See *Die Fragmente der Vorsokratiker*, Diels/Kranz, Vol. 2, 28B8.

renders itself *beyond the pale*, becomes too great, too high, is brought **21.326**
down to the other extreme of being reduced to nothing, so that the mean of measure, the medium, is restored. – That the Absolute, God, is the *measure* of all things, is not a stronger statement of pantheism than the definition, "the Absolute, God, is *being*," but is infinitely truer. – Measure is indeed an external way of things, a more or less, but one which is as at the same time reflected into itself, not merely an indifferent and external determinateness but one which exists in itself; thus it is *the concrete truth of being*. For this reason the nations have revered in it the presence of something inviolable and sacred.

Already present in measure is the idea of *essence*, namely of being self-identical in the immediacy of being determined, so that this immediacy is reduced through the self-identity to something mediated, just as the self-identity is equally mediated only through this externality, but the mediation is one *with itself*: this is reflection, the moments of which indeed *are*, but in this being are absolutely nothing but moments of their negative unity. In measure, the qualitative element is quantitative; the determinateness or the difference is indifferent and therefore a difference which is none; it is sublated and this quantitativeness,[10] as an immanent turning back in which it is qualitative, constitutes the being-in-and-for-itself which is essence. But measure is essence only *implicitly in itself* or in its concept; this *concept* of measure is not yet *posited*. Measure is as such still the *existent* unity of the qualitative and the quantitative element; its moments are an existence, a quality and some quanta of this quality which, in themselves, are indeed only indivisible, but do not yet have the meaning of this reflected determination. In the development of measure, these moments are differentiated but at the same time *referred to each other*, so that the identity which they are *in themselves* becomes their connection *explicitly*, that is, is *posited*. The meaning of this development is the realization of measure in which the latter posits itself in relation to itself and consequently as moment as well; through this mediation, measure is determined as sublated; its immediacy as well as that of its moments disappears; these moments are reflected and thus measure, having disclosed what it is according to its concept, has passed over into *essence*.

Measure is at first the *immediate* unity of the qualitative and the quantitative element, so that it is, **21.327**

first, *a quantum* that has qualitative meaning and is *as measure*. As so implicitly determined *in itself*, its further determination is that the

[10] *Quantitativität.*

difference of its moments, of its qualitatively and quantitatively determined being, is disclosed *in it*. These moments further determine themselves into wholes of measure which as such are *self-subsistent*, and, inasmuch as they refer to each other essentially, measure becomes,

second, *a ratio* of specific quanta, *each an independent measure*. But their self-subsistence also rests essentially on a quantitative relation and a difference of magnitude, and so the self-subsistence becomes a transition of one measure into another. The result is that measure collapses into the *measureless*. – But this beyond of measure is the negativity of measure only in itself; thus,

third, *the indifference* of the determinations of measure is thereby posited, and measure (real measure because of the negativity contained within it) is posited as an *inverse ratio of measures* which, as self-subsistent qualities, essentially rest on only their quantity and their negative reference to each other, and consequently prove to be only moments of their truly self-subsistent unity. This unity is the reflection-into-itself of each and the positing of them; it is *essence*.

The development of measure, which we have attempted in what follows, is among the most difficult of subject matters. Starting with immediate, external measure, it would have to proceed, on the one hand, to the further abstract determination of the quantitative aspect of natural things (of a *mathematics of nature*); on the other side, it would have to indicate the link between this determination of measure and the *qualitative* aspect of those things – at least in general, for the detailed demonstration of the *link* between the qualitative and the quantitative aspects as they originate in the concept of a concrete object belongs to the particular science of the concrete (examples of which, concerning the law of falling bodies and the free movement of the heavens, will be found in the *Encyclopedia of the Philosophical Sciences*).[11] We may remark quite in general in this connection
21.328 that the different forms in which measure is realized also belong to *different spheres of natural reality*. The complete, abstract indifference of developed measure, that is, of its *laws*, can only be found in the sphere of *mechanism* where concrete corporeity is only abstract matter itself; the qualitative differences of this matter are of an essentially quantitative nature; *space and time* are nothing but pure externalities, and the *aggregates* of matters, the masses, the intensity of *weight*, are determinations which are just as external and have their proper determinateness in the quantitative element. On the other hand, in *physical* things but even more so in the *organic*, this

[11] 3rd edn, §267 and 270, Remark.

quantitative determinateness of abstract materiality is already disturbed by the multiplicity and consequently the conflict of qualities. And the thus ensuing conflict is not just one of qualities as such, but measure itself is subordinated here to higher relations and its *immanent development* is reduced rather to the simple form of immediate measure. The limbs of the animal organism have a measure which, as a simple quantum, stands in a ratio to the other quanta of the other limbs; the proportions of the human body are the fixed ratios of such quanta, and the science of nature still has far to go in discovering anything about the link that connects these magnitudes with the organic functions on which they are entirely dependent. But the closest example of the reduction of an immanent measure to a merely externally determined magnitude is motion. In the heavenly bodies, motion is free motion, one which is only determined by the concept from which alone, consequently, its magnitudes equally depend (see above); but in the organic body this free motion is reduced to one which is *arbitrary* or mechanically regular, that is, to one which is totally abstract and formal.

And in the realm of spirit there is even less of a characteristic, free development of measure to be found. For instance, it is obvious that a republican constitution like the Athenian, or an aristocratic constitution mixed with democracy, is possible only in a state of a certain size; it is also obvious that in civil society the multitudes of individuals who belong to the different occupations stand in a certain ratio to each other. But none of this yields either laws of measures or typical forms of it. In the spiritual realm as such there are indeed distinctions of *intensity* of character, *strength* of imagination, sensations, representations, and so on; but in determining them one cannot go past this indefinite duo of "strength" and "weakness." To see how lame and totally empty ultimately turn out to be the so-called laws which have been established for the relation of strength and weakness in sensations, representations, and so on, one need only look at the psychologies that busy themselves with just such matters.

CHAPTER I

21.329

Specific quantity

Qualitative quantity is,

first, an immediate, *specific quantum*; and this quantum,

second, in relating itself to another, becomes a quantitative *specifying*, a sublating of the indifferent quantum. This measure is to this extent a *rule* and contains the *two moments* of measure as *different*; namely, the quantitative determinateness and the external quantum as existing in themselves. In this difference, however, the two sides become qualities, and the rule becomes a relation of the two; measure presents itself thereby,

third, as a *relation of qualities* that have one single measure at first – a measure, however, which further specifies itself in itself into a difference of measures.

A. THE SPECIFIC QUANTUM

1. Measure is the simple self-reference of quantum, its own determinateness in itself; quantum is thus qualitative. At first, as an immediate measure it is an immediate quantum and hence some specific quantum; equally immediate is the quality that belongs to it; it is some specific quality or other. – Thus quantum, as this no longer indifferent limit but as self-referring externality, is itself quality and, although distinguished from it,
21.330 it does not extend past it, just as quality does not extend past quantum. Quantum is thus the determinateness that has returned into simple self-equality – which is at one with determinate existence just as determinate existence is at one with it.

If a proposition is to be made of the determination just obtained, it could be expressed thus: "Whatever is, has a measure." Every existence has a magnitude, and this magnitude belongs to the very nature of a something; it constitutes its determinate nature and its in-itself. The something is not indifferent to this magnitude, as if, were the latter to alter, it would remain the same; rather the alteration of the magnitude alters its quality. As measure

the quantum has ceased to be a limit which is none; it is from now on the determination of a thing, so that, were the latter to exceed or fall short of this quantum, it would perish. –

A measure, in the usual sense of a standard, is a quantum which is arbitrarily assumed as the unit *determinate in itself* as against an external amount. Of course, such a unit can in fact also be determinate in itself, like a foot or some such other original measure; to the extent, however, that it is used as the measuring standard for other things, it is with respect to them only an external measure, not their original measure. – Thus the diameter of the earth or the length of a pendulum may be taken as a specific quantum on their own account. But the choice of a fraction of the earth's diameter or of the pendulum's length, and this last under which degree of latitude, for use as a standard of measure is arbitrary. And for other things such a standard is something even more external. These have further specified the universal specific quantum in some particular way, and they have thereby been made into particular things. It is therefore foolish to speak of a natural *standard* of things. Anyway, a universal standard is meant for use only as an *external* comparison of things, and in this superficial sense of *universal standard* it is quite a matter of indifference what is used for the purpose. It is not meant to be a fundamental measure in the sense that in it the natural measures of particular things would be displayed and recognized, according to a rule, as the specifications of one universal measure, the measure of the things's universal body. But without this meaning the sole interest and significance of an absolute standard of **21.331** measure is that of *something common*, and any such standard is a universal not *in itself* but only by convention.

Immediate measure is a simple determination of magnitude as, for example, the size of organic beings, of their limbs, and so forth. But any concrete existent has the size required for being what it is, and for having existence in the first place. – As a quantum, the existent is an indifferent magnitude open to external determination and capable of fluctuating increases and decreases. As a measure, however, it is at the same time distinct from itself as quantum, itself as such an indifferent determination, and is a restriction on that indifferent fluctuation of a limit.

Since in the existence of anything the quantitative determinateness is thus twofold, in the sense that quality is tied to it and yet the quantity can fluctuate without prejudice to quality – so the demise of anything that has a measure occurs through the alteration of its quantum. On the one hand, the demise appears *unexpected*, inasmuch as there can be alteration in the quantum without the measure and the quality being altered; but, on

the other hand, it is made into something quite simple to grasp by means namely of the concept of *gradualness*. It is easy to turn to this category for visualizing or "explaining" the disappearance of a quality or of a something, for it gives the impression that one can witness this disappearance as if before one's eyes: since the quantum is posited as the external limit which is by nature alterable, the *alteration* (of quantum only) then follows by itself. But in fact nothing is thereby explained, for the alteration is at the same time essentially the transition of one quality into another, or the more abstract transition of one existence into a non-existence, and therein lies another determination than just gradualness, which is only a decrease or increase, and the one-sided holding fast to magnitude.

2. The ancients had already taken notice of this coincidence, that an alteration which appears to be only quantitative suddenly changes into a qualitative one, and they used popular examples to illustrate the inconsistencies that arise when such a coincidence is not understood. Two such examples go under the familiar names of "the bald" and "the heap." They are *elenchi*, that is, according to Aristotle's explanation, two ways in which
21.332 one is compelled to say the opposite of what one has previously asserted.[12] The question was put: does the plucking of one hair from someone's head or from a horse's tail produce baldness, or does a heap cease to be a heap if one grain is removed? The expected answer can safely be conceded, for the removal amounts to a merely quantitative difference, and an insignificant one at that. And so one hair is removed, one grain, and this is repeated with only one hair and one grain being removed each time the answer is conceded. At last the qualitative alteration is revealed: the head or the tail is bald; the heap has vanished. In conceding the answer, it was not only the repetition that was each time forgotten, but also that the individually insignificant quantities (like the individually insignificant disbursements from a patrimony) *add up*, and the sum constitutes the qualitative whole, so that at the end this whole has vanished: the head is bald, the purse is empty.

The embarrassment, the contradiction, produced by the result, is not anything sophistic in the usual sense of the word, as if the contradiction were a pretense. The mistake is committed by the assumed interlocutor (that is, our ordinary consciousness), and that is of assuming a quantity to be only an indifferent limit, that is, of taking it in the narrowly defined sense of a quantity. But this assumption is confounded by the truth to which it is brought, namely that quantity is a moment of measure and

[12] See Aristotle, *Sophistical Refutations*, 164b 27–165a 2.

is linked to quality; refuted is the one-sided stubborn adherence to the abstract determinateness of quantum. – Also those elenchi are, therefore, not anything frivolous or pedantic but basically correct: they attest to a mind which has an interest in the phenomena that come with thinking.

Quantum, when it is taken as indifferent limit, is the side from which an existence is unsuspectedly attacked and laid low. It is the *cunning* of the concept that it would seize on an existence from this side where its quality does not seem to come into play – and it does it so well that the aggrandizement of a State or of a patrimony, etc., which will bring about the misfortune of the State or the owner, even appears at first to be their good fortune.

3. Measure is in its immediacy an ordinary quality of a specific magnitude appropriate to it. Now there is also the distinction between the side according to which quantum is an indifferent limit that can fluctuate without the quality altering and the other side according to which it is qualitative and specific. Both sides are the magnitude determinations of one and the same thing; but because of the original immediacy of measure, this distinction too is to be taken as immediate, and accordingly the two sides each also have a diverse concrete existence. The concrete existence of measure, which is the side of magnitude determinate *in itself*, then behaves **21.333** towards the concrete existence of the alterable external side by sublating the indifference of the latter; this is a *specifying* of measure.

B. SPECIFYING MEASURE

First, this measure is a rule, a measure external to the mere quantum.

Second, it is a specific quantity determining the external quantum.

Third, the two *sides*, *both as qualities* of specific quantitative determinacy, relate to one another as *one measure*.

a. The rule

The rule, or the standard which we have just mentioned, is in the first instance as a magnitude which is determinate in itself and is a unit with respect to a quantum of a particular concrete existence: this is a quantum with a concrete existence which is other than the something of the rule – is measured by the latter, that is, is determined as the amount of the said unit. This *comparison* is an *external* act, and the unit itself is an arbitrary magnitude which can in turn be posited as an amount (the foot as an

amount of inches). But measure is not only an external rule; as a specific measure its intrinsic nature is that it relates to its other which is a quantum.

b. Specifying measure

Measure is a specific determining of the *external* magnitude, that is, of the indifferent magnitude which is now posited in the measuring something by some other concrete existence in general.[13] The something of the measure is indeed itself a quantum, but with the difference that it is the qualitative side determining the merely indifferent, external quantum. It has intrinsically this side of being-for-other to which the fluctuation in size belongs. The immanent measuring is a quality of the something, and this something
21.334 is confronted by the same quality in another something; in the latter, however, the quality is at first relative, with a measureless quantum in general as against the something determined as measuring.[14]

Inasmuch as a something has an internal measure, an alteration of the magnitude of its quality comes to it from outside, and the something does not take on the arithmetical aggregate of the alteration. Its measure reacts against it, behaves towards the aggregate as an intensive measure and assimilates it in a way typically its own; it alters the externally imposed alteration, makes something else out of this quantum and demonstrates through this specifying function that in this externality it is for-itself. – This *specifically assimilated* aggregate is itself a quantum which is also dependent on the other, that is, on the other aggregate which is only *external* to it. The specified aggregate is therefore also alterable, but is not for that reason a quantum as such but the external quantum as specified in a constant manner. Measure thus has its determinate existence as a *ratio*, and its specificity is in general the *exponent* of this ratio.

In *intensive* and *extensive* quantum, as we saw when considering these determinations,[15] it is *the same* quantum which is present, once in the form of intensity and again in the form of extension. In this difference the underlying quantum does not suffer any alteration; the difference is only an external form. In the specifying measure, on the contrary, the quantum

[13] "measuring something" = *Etwas des Maßes* (literally: "the something of the measure"). For example, "temperature" is the specifying measure of the otherwise indifferent magnitude of "water." The latter is specified as "hot" or "cold" to some degree or other – "hot" and "cold" being the "the measuring something." But this specification is done according to that same measure as specified in some other magnitude (i.e. "some other concrete existence in general"; for instance, "mercury").

[14] i.e. each measure, as a concrete "something" ("feet," "inches," etc.), is in principle measurable by some other measure which is, however, left indeterminate.

[15] Cf. above, 21.213.

is taken in one instance in its immediate magnitude, but through the exponent of the ratio it is taken in a second instance in another amount.

The exponent which constitutes the element of specificity can appear at first to be a fixed quantum, as a quotient of the ratio between the external and the qualitatively determined quantum. But it would then be nothing more than an external quantum whereas by the exponent we are to understand here nothing but the qualitative moment itself that specifies the quantum as such. The only strictly immanent qualitative determination of the quantum is (as we saw earlier)[16] that of the *exponent*, and it must be such an exponential determination which now constitutes the ratio and which, as the internally existent determination, comes to confront the quantum as **21.335** externally constituted. The principle of this quantum is the numerical one which constitutes its internal determinateness: the mode of connection of this numerical one is external, and the alteration which is determined only through the nature of the immediate quantum as such consists essentially in the addition of one such numerical one and then another and so forth. As the external quantum alters in arithmetical progression in this way, the specifying reaction of the qualitative nature produces another series which refers to the first, increases and decreases with it, not however in a ratio determined by a numerical exponent but in a ratio which is numerically incommensurable, in the manner of a power determination.

Remark

To cite an example, *temperature* is a quality in which these two sides of external and specified quantum are distinguished. As a quantum the temperature is external and is also, indeed, the temperature of a body as a general medium, and it is assumed that its alteration runs on the scale of an arithmetical progression, increasing or decreasing uniformly. But in fact the temperature is differently assimilated by the different particular bodies found at that temperature, for since these bodies determine the externally received temperature through their immanent measure, the change in temperature of any of them does not correspond in a direct ratio to that of the medium or any other among them. Different bodies compared at one and the same temperature give the numerical ratios of their specific heats, of their thermal capacities. But such thermal capacities of bodies vary at diverse temperatures, and associated with the variation is the appearance of an alteration in specific shape. In the increase or decrease of temperature **21.336**

[16] Cf. above, 21.275, 318–320.

there is thus manifested a particular specification. The ratio of the temperature, represented as external, to the temperature of a particular body which is at the same time dependent on that temperature, does not have a fixed ratio exponent; the increase or decrease of this heat does not proceed uniformly with the increase or decrease of the external heat. – A temperature is being assumed here which is absolutely external, of which the alteration would be merely external or purely quantitative. But the temperature is itself the temperature of air or some other specific temperature. The ratio, therefore, if looked at more closely, would properly have to be taken not as the ratio of a merely quantitative quantum to a qualifying quantum, but of two specific quanta. And this is how the specifying ratio is now further determined: the moments of measure are not only the sides of one and the same quality, one side quantitative and the other side qualifying the quantum, but consist rather in the relation of two qualities which are in themselves measures.

c. Relation of the two sides as qualities

1. The qualitative side of the quantum, in itself determined, exists only as a reference to the external quantitative side; as specifying the latter, it is a sublating of its externality through which quantum as such is. This qualitative side thus has a quantum for the presupposition from which it starts. But this quantum is also qualitatively distinguished from quality, and this difference between the two must now be posited in the *immediacy* of being in general which still characterizes measure. The two sides thus stand to each other in a qualitative respect, each a qualitative existence for itself, and the one side that was at first only an internally indeterminate formal quantum is the quantum of a something and of its quality, and, just as their reciprocal reference is now determined as measure in general, so too is the specific magnitude of these qualities. These qualities stand
21.337 in relation to each other according to a determination of measure. This determination is their exponent, but they are already implicitly connected to each other in the *being-for-itself* of measure: the quantum is in its double being external quantum and specific quantum, so that each of the distinct quantities has this double determination in it and is at the same time inextricably interwoven with the other; it is in this way alone that the qualities are determined. They are not, therefore, a determinate being in general existing for each other but are rather posited as indivisible, and the specific magnitude tied to them is a qualitative unity – *one* determination of measure in which they are implicitly bound together in accordance with

their concept. Measure is thus the *immanent* quantitative relating of *two* qualities to each other.

2. In measure we have the essential determination of *variable magnitude*, for measure is sublated quantum – quantum, therefore, no longer as that which it ought to be in order to be quantum, but quantum as quantum and as something other besides. This other is the qualitative element and, as we have established, is nothing else than the relation of powers of the quantum. In immediate measure, this variability is not yet posited; it is just one single quantum or other to which a quality is attached. In the specifying of measure (the preceding determination), which is an alteration of the merely external quantum by the qualitative moment, what is posited is the distinctness of two determinate magnitudes and hence in general the plurality of measures in one common, external quantum. And it is in this differentiation of the quantum from itself that the latter shows itself for the first time to be a real measure, for it appears as a being which is one and the same (e.g. the constant temperature of the medium) and at the same time of diversified and indeed quantitative existence (in the various temperatures of the bodies found in the medium). This differentiation of quantum into the diverse qualities – the different bodies – yields a further form of measure, one in which the two sides relate to each other as qualitatively determined quanta, and this can be called the *realized measure*.

Magnitude, simply as such, is alterable, for its determinateness is a limit which at the same time is none; the alteration only affects, therefore, a particular quantum in place of which another is posited. But the genuine alteration is that of the quantum as such. Here we have the determination, interesting when so understood, of the variable magnitude of higher mathematics in which we neither need to stop short at the formal determination of *alteration* or *variability* in general nor introduce any other determination except the simple determination of the concept by which the *other of the quantum is only the qualitative*. The genuine determination, therefore, of real variable magnitude is that it is qualitative, that is, as we have sufficiently shown, that it is determined by a ratio of powers. *Posited* **21.338**
in this variable magnitude is that quantum has no value as such but only as determined in conformity with its other, that is, qualitatively.

The two sides in this relating have, in keeping with their abstract side as qualitites in general, some particular meaning or other, for instance, space and time. Taken at first simply as determinacies of magnitude in their ratio of measure, one of them is the amount which increases and decreases in external arithmetical progression; the other is an amount specifically determined by the other amount, which for it is the unit. If each of these

two sides were only a particular quality in general, there would be no way of distinguishing which of them is to be taken with respect to their determination of magnitude as merely externally quantitative and which as varying in quantitative specification. If they are related, for instance, as root and square, it is indifferent which is regarded as increasing or decreasing in merely external arithmetical progression, and which on the contrary has its specific determination in this quantum.

But the two qualities are not indeterminate in their difference, for they are the moments of measure and the qualification of the latter ought to rest on them. The closest determinateness of the qualitites themselves is, of the one, the *extensive*, that it is an externality within; and of the other, the *intensive*, that it exists in itself or is the negative as against the other. Accordingly, amount is the quantitative moment that pertains to the former, and unit the one that pertains to the latter; in simple direct ratio, the former is to be taken as the dividend and the latter as the divisor; in specifying ratio, the former as the power or the becoming-other and the latter as the root. Inasmuch as we still *count* here, that is, we reflect on the external quantum (which is thus the totally accidental determinateness of magnitude which we call empirical), and accordingly also equally take the
21.339 alteration as advancing in external arithmetical progression, then this falls on the side of the unit, the intensive quality; the external extensive side, by contrast, is to be represented as altering in the specified series. But the direct ratio (like velocity as such, $\frac{s}{t}$) is reduced here to a formal determination which has no concrete existence but belongs rather only to the abstraction of reflection; and even though in the ratio of root and square (as in $s = at^2$), the root is to be taken as an empirical quantum varying in an arithmetical progression, the other side as specified instead, the higher realization of the qualification of the quantitative moment, one which would be more in keeping with the concept, is this: that both sides are related in higher determinations of powers (as in $s^3 = at^2$).

Remark

The discussion here regarding the connection in measure between the qualitative nature of an existence and its quantitative determination has its application in the already cited example of motion, first of all in the fact that in *velocity*, as the direct ratio of traversed space and the elapsed time, the magnitude of time is taken as denominator and that of space as numerator. If velocity is as such only a ratio of the space and time of a motion, it is then indifferent which of the two moments should be considered as the numerator and which as the unit. But space, like weight

in specific gravity, is an external, real whole as such, and hence amount; time, like volume, is on the contrary the ideal, the negative, the side of unity. – But the more important ratio, the one essential to the point at issue here, is the one that holds in *free motion* – in the first instance in the still conditioned motion of a *falling body*, where the quantitative values of time and space are reciprocally determined as root and square respectively; and then in the absolutely free motion of the celestial bodies, where the period of revolution and the distance[17] are reciprocally determined, the one as one power lower than the other, as square and cube respectively. Fundamental relations of this kind rest on the nature of the related qualities, of space and time, and on the way they stand connected, whether their motion is mechanical (that is, unfree or not determined by the concept of its moments), or is the motion of a falling body (that is, conditionally free), **21.340** or the absolutely free motion of the heavens. These kinds of motion as well as their laws rest on the development of the concept of their moments, space and time, for these qualities prove as such, *in themselves* or in their concept, to be *indivisible*, and their quantitative relation, the *being-for-itself* of measure, is only *one* measure-determination.

Regarding the absolute relations of measure, it should be noted that the *Mathematics of Nature*, if at all worthy of the name of science, would have to be essentially the science of measure – a science to which much has indeed been contributed empirically, but still preciously little scientifically, that is, philosophically. *Mathematical principles of natural philosophy*, as Newton called his work,[18] if they are to live up to this title in a deeper sense than Newton and those of the entire Baconian lineage of philosophy did, would have to contain things of quite a different nature in order to shed some light on these regions, still dark yet eminently worthy of attention. – It is a great service to discover the empirical numbers of nature, e.g. the distances of the planets from each other; but an infinitely greater service would be to make the empirical quanta disappear by raising them to a *universal form* of quantitative determinations in which they become the moments of *law* or of measure – immortal services which, for instance, Galilei achieved for the motion of falling bodies and Kepler for the movement of the celestial bodies. These men have *proven* the laws they have discovered by showing that the full compass of the singular things of perception conform to them. But a still higher proof of these laws must be demanded – nothing less, namely, than of knowing their quantitative determinations from the qualities or determinate concepts connected in them (such as space and

[17] From the center. [18] i.e. *Philsophiæ naturalis principia mathematica*.

time). Of this kind of proof there is still no trace in the cited mathematical principles of *natural philosophy*, as also there is none in subsequent works of the same kind. It has already been remarked – in connection with the semblance of mathematical proofs of certain natural relations, a semblance based on the misuse of the infinitely small[19] – that the attempt to conduct any such proof on a truly *mathematical* basis, that is, neither empirically
21.341 nor conceptually, is an absurd undertaking. Proofs of this kind *presuppose* their theorems and even the laws to be proved from experience; what they manage to accomplish amounts to this, that they reduce such theorems and such laws to abstract expressions and convenient formulas. A better informed day will come when the entire and truly real merit that will be attributed to Newton in these matters as against Kepler – once the sham scaffolding of proofs has been cast aside, undoubtedly because of a clearer awareness of what mathematics can deliver and has delivered – will be restricted to Newton's said *transformation* of Kepler's formula[o] and to his albeit still *incipient* introduction of analysis.

c. the being-for-itself in measure

1. In the form of specified measure just considered, the quantitative moment of each side is qualitatively determined (both in the ratio of powers); they are thus moments of one measure-determinateness of qualitative nature. Here, however, the qualities are still posited immediately, *only as diverse*; they are not related in the manner of their quantitative determinacies, that is, that *outside* their relation they would have neither meaning nor existence, as is the case for the quantitative determinacies as a ratio of powers. The qualitative moment thus disguises itself as specifying, not itself, but the determinateness of magnitude. Only *within* the latter is it *posited*; for itself it is instead *immediate* quality as such which, besides the fact that it posits the magnitude as non-indifferent, and besides its connection with its other, still has existence subsisting on its own. Thus space and time, outside that specification which their quantitative determinateness obtains in the motion of falling bodies or in the absolutely free motion, both have the value of space in general and time in general, space subsisting on its own outside and without the duration of time, and time flowing on its
21.342 own independently of space.

[o] See *Encyclopedia of the Philosophical Sciences*, Remark at §270, concerning the transformation of Kepler's $\frac{S^3}{T^2}$ into Newton's $S^2 \cdot \frac{S}{T^2}$, inasmuch as the fraction $\frac{S}{T^2}$ is called the force of gravity.

[19] Cf. above, 21.272.

This immediacy of the qualitative moment as against its specific measure-relation is, however, equally bound up with a quantitative immediacy and with the indifference to this same measure-relation of the *quantitative* element in it; the immediate quality also has only an *immediate quantum*. For that reason, the specific measure also has a side of an at first external alteration which advances in merely arithmetical progression undisturbed by it and in which falls the external and hence merely empirical determination of magnitude. Quality and quantum, even as they extend outside measure, are at the same time connected with it; the immediacy is a moment of their belonging to measure. Thus the immediate qualities also belong to measure, are likewise connected and stand in a ratio which, outside the specified one of power determination, is itself only a direct ratio and an immediate measure. This conclusion and its consequences must now be indicated.

2. Although the immediately determined quantum is as a moment of measure otherwise implicitly grounded in a conceptual nexus, in connection with specific measure it is, as such, externally given. But the immediacy which is thereby posited is the negation of the determination of qualitative measure; the same immediacy was shown just now on the sides of the determination of measure which appeared for that reason to be self-subsisting qualities. Such a negation and the return to immediate quantitative determinateness are present in the qualitatively determined relation because a relation of distinct terms entails as such the connection of such terms in *one* determinateness, and here, in the quantitative sphere, in distinction from the determination of the relation, this determinateness is a quantum. As the negation of the distinct, qualitatively determined sides, this exponent is a being-for-itself, an absolutely determined being, but is so only *in itself*; as existence, it is a simple immediate quantum, the quotient or exponent of a ratio between the sides of measure which is taken as direct; as such, however, it appears in the quantitative side of measure as an empirical unit. – In the motion of falling bodies, the spaces traversed are proportional to the square of the elapsed time, $s = at^2$. This is a specifically determinate ratio, one between space and time; the other, the direct ratio, would pertain to space and time as mutually indifferent qualities; it is supposed to be the ratio of the space traversed to the *first* moment of time. The same coefficient, a, remains in all the succeeding time-points – the *unit* of the amount, determined for its part by the specifying measure, being an ordinary quantum. This unit counts at the same time as the exponent of that direct ratio which pertains to the *merely imagined*, the bad, that is, **21.343** the reflectively formal velocity which is not specifically determined by the

concept. Such a velocity does not have concrete existence here, no more than does the one previously mentioned which is supposed to pertain to a falling body at the *end* of a moment of time. That velocity is ascribed to the *first* temporal moment in the fall, but this so-called temporal moment is itself only an assumed unit which has no existence as such an atomic point. The beginning of the motion (its alleged smallness would make no difference) is straight away a magnitude, and one which is specified by the law of falling bodies. The said empirical quantum is attributed to the force of gravity, and this force thus has itself no connection with the specification at hand (the determinateness of powers), that is, with the determinateness characteristic of measure. The *immediate* moment, that in the motion of falling bodies the amount of some fifteen spatial units which are assumed as feet enter into one unit of time (call it a second, the so-called *first* unit), is an *immediate* measure, just like the size of human limbs, the distances and diameters of planets, etc. The determination of such measures falls elsewhere than within the qualitative determination of measure, here of the law itself of falling bodies. On what such *numbers* depend, these merely immediate and therefore empirical appearances of a measure – on this the concrete sciences have yet to give us any information. Here we are only concerned with this conceptual determination, namely that in any determination of measure the empirical coefficient constitutes the *being-for-itself*, but only the moment of the being-for-itself, in so far as it is *in principle* and therefore as immediate. The other moment is the development of this being-for-itself, the specific measure-determinateness of the sides. – According to this second moment, in the ratio expressing the motion of falling bodies (this motion that is still half conditioned and half free) gravity is to be regarded as a force of nature. Its ratio is thus determined by the nature of time and space, and the said specification – the ratio of powers – therefore falls in it; the other moment mentioned above, the simple direct ratio, expresses only a mechanical relation of time and space, a reflectively formal velocity externally produced and externally determined.

3. Measure has now taken on the determination of being a specified quantitative relation, one which, as qualitative, has within it the usual external quantum; but this quantum is not a quantum in general but essentially the determining moment of the relation as such; it is thus an exponent and, because of the immediacy now of its determinateness, an invariable exponent, consequently an exponent of the already mentioned direct ratio of the same qualities whose reciprocal quantitative relation is at the same time specifically determined by the ratio. In the example of

measure that we have used, that of the motion of falling bodies, this direct ratio is, as it were, anticipated and assumed as given, but, as remarked, in this motion it still does not have concrete existence. – However, that matter is now *realized* – in that its sides are both measures, one distinguished as immediate and external and the other as internally specified, while measure itself is the unity of the two – this constitutes a further determination. As the unity of its two sides, measure contains the relation in which the magnitudes, by virtue of the nature of the qualities, are posited as determined and non-indifferent; its determinateness, therefore, is entirely immanent and self-subsisting, and has at the same time collapsed into the being-for-itself of an immediate quantum, the exponent of a direct ratio. In this the self-determination of measure is *negated*, for in this immediate quantum, its other, measure has a final self-existent determinateness; conversely, the immediate measure which ought to be internally qualitative assumes truly qualitative determinateness only in that other. This negative unity is *real being-for-itself*, the category of a *something* which is the unity of qualities in a relation of measure – a complete *self-subsistence*. The two resulting diverse relations also immediately yield a twofold existence, or, more precisely, that self-subsisting whole, as *a being that exists for itself*, is as such in itself a repulsion into *distinct self-subsisting somethings* whose qualitative nature and subsistence (materiality) lies in their determinateness of measure. **21.344**

CHAPTER 2

Real measure

21.345

Measure is now determined as a connection of measures that make up the quality of distinct self-subsisting somethings, or, in more common language, *things*. The relations of measures just considered belong to abstract qualities like space and time; further examples of these now to be considered are specific gravity and then chemical properties, that is, determinations of concrete *material* existence. Space and time are also moments of these measures, but are now subordinated to other determinations and no longer behave relative to one another only according to their own conceptual determination. In the case of sound, for instance, the *time* within which a certain number of vibrations occur, the spatial width and thickness of the sounding body, are moments of its determination. But the magnitudes of such idealized moments are externally determined; they no longer assume the form of a ratio of powers but relate in the usual direct way, and harmony is reduced to the strictly external simplicity of numbers in relations which are most easy to grasp; they therefore afford a satisfaction which is the exclusive reserve of the senses, for there is nothing there of representation, imagery, thought, or the like, that would satisfy spirit. Since the sides which now constitute the relation of measure are themselves measures, but at the same time real somethings, their measures are, in the first instance, immediate measures, and the relations in them direct relations. We now have to examine the further determination of the relation of such relations.

Measure, now real measure, is as follows.

First, it is the independent measure of a type of body, a measure which relates to *other measures* and, in thus relating to them, specifies them as well as their self-subsistent materiality. This specification, as an external
21.346 connecting reference to many others in general, produces other relations, and consequently other measures; the specific self-subsistence, for its part, does not remain fixed in *one* direct relation but passes over into *specific determinacies*, and this is a *series* of *measures*.

Second, the direct relations that thus result are in themselves determinate and exclusive measures (elective affinities).[20] But because they are at the same time only quantitatively different from one another, what we have is a progression of relations which is in part merely external, but is also interrupted by qualitative relations, forming a *nodal line* of *specifically self-subsisting things*.

Third, what emerges in this progression for measure, however, is the *measureless*: the measureless in general and more specifically the *infinitude* of measure in which the mutually exclusive forms of self-subsistence are one with each other, and anything self-subsistent comes to stand in negative reference to itself.

A. THE RELATION OF INDEPENDENT MEASURES

By measures we no longer mean now merely immediate measures, but measures that are self-subsistent because they become within themselves relations which are specified, and in this being-for-itself they are thus a something, things that are physical and at first material.

(a) However, the whole, which is a relation of such measures is at first itself *immediate*. Thus the two sides, which are as such independent measures, have their subsistence in things external to each other, and are posited in *combination externally*.

(b) But the self-subsistent materialities are what they qualitatively are only in virtue of the quantitative determination that they have as measures, and are posited in virtue of this same quantitative connection with others as *non-indifferent* from them (the so-called *affinity*); they are the *members of a series* of such quantitative relations.

(c) This indifferent multifarious relating concludes at the same time by cutting itself off as an *exclusive* being-for-itself – the so-called *elective affinity*. **21.347**

a. Combination of two measures

As a measure relation, something is in itself determined by quanta to which further qualities accrue; the something is the connection of such qualities. One of them is the something's *in-itselfness*, according to which

[20] This is a term which was introduced around the middle of the eighteenth century to describe the tendency of chemical species to combine with some substances in preference to others. Goethe popularized the term by extending its meaning to include human relations, in his novella *Elective Affinities* (1809).

it is something that exists for itself, something material (a weight, if taken intensively; or, taken extensively, an aggregate of parts); the other is however the *externality* of this itselfness (something abstract and idealized, space). These qualities are quantitatively determined, and their mutual relation is what constitutes the qualitative nature of the material something – the ratio of weight to volume, the specifically determined gravity. The volume, the idealized element, is the one to be taken as unit, whereas the intensive aspect, which in quantitative determinateness and in comparison with the other appears as extensive magnitude, that is, an aggregate of ones existing for themselves, is the amount. – The purely qualitative relating of the two determinacies of magnitude in a ratio of powers has disappeared, because with the self-subsistence of the being-for-itself (the material being) immediacy has come back, and in this immediacy the determinateness of magnitude is a quantum whose relation to the other side is likewise determined in the ordinary exponent of a direct ratio.

This exponent is the specific quantum of the something, but it is an immediate quantum and this is determined – as is also the specific nature of the something – only in *being compared* with other exponents of like ratios. The exponent constitutes the *specific* way in which the something is determined *in itself*, the inner measure characteristic of it; but since this, the something's measure, rests on a quantum, it is also an external and indifferent determinateness, and the something, despite its inner determination as measure, is for this reason subject to alteration. The other to which it can relate as alterable is not an aggregate of matters, not a quantum in general; on the contrary, against these it holds out its specific intrinsic determination of being; rather, it is a quantum which is at the same time it too the exponent of such a specific ratio. Take two things of different inner measure that stand connected and enter into composition, say, two metals of different specific gravity. (In what way the two must otherwise be homogeneous in nature in order for the composition to be possible, e.g. that we cannot be speaking here of a metal combining with water, this is not at issue here). – Now, on the one hand each of the two measures preserves itself in the alteration they will incur because of the externality of quantum, for each is a measure; but, on the other hand, this self-preservation is itself a negative relating to the quantum, a specification of it, and, since this
21.348 quantum is the exponent of the ratio of measure, the self-preservation is an alteration of the measure itself and indeed a reciprocal specification.

According to its merely quantitative determination, the compound would be the mere sum of the two magnitudes of the one quality and the two magnitudes of the other quality, e.g. the sum of the two weights

and the two volumes in a compound of two matters of different specific weights, so that not only would the weight of the mixture remain equal to the said sum but also the space which the mixture occupies would remain equal to the sum of the two spaces. But only the weight of the mixture is found to be in fact the sum of the weights present prior to combination; the side capable of addition is the one which, as the one existing for itself, has attained stability of being and consequently a permanent immediate quantum – the weight of matter, or, what amounts to the same thing from a quantitative standpoint, the aggregate of material parts. Alteration falls instead in the exponents, for they are the expression of the qualitative side of the compound, of its being-for-itself as relations of measure, and, since the quantum as such is subject to accidental alteration by an increase which is summed, this being-for-itself proves at the same time to be a negating factor with respect to this externality. Since this immanent determining of the quantitative element cannot appear, as we have seen, in the weight, it turns up in the other quality which is the idealized side of the relation. It might be surprising to sense-perception that, upon the mixing of two specifically diverse materials, what results is an alteration of the total volume, normally a diminution of it, for it is space which gives stability to matters otherwise existing outside one another. But this stability, in face of the negativity which is in the being-for-itself, is that which has no existence in itself, is the alterable as such. In this manner, space is posited as what it is in truth, an idealization.

But then, not only is one of the qualitative sides posited as alterable but measure itself, and so also the qualitative determinateness of the something which is based on it, has shown itself not to be something stable within but, like quantum in general, to have its determinateness in other measure-relations.

b. Measure as a series of measure-relations

1. If something united with an other were what it is only by virtue of simple qualitative determination, and the same also applied to the other, then the two would only sublate themselves in being compounded. But when something is in itself a measure-relation, it is independent yet at the same time capable of union with another which is also in itself a measure-relation. For in being sublated in union, each preserves itself through the permanence of its quantitative indifference and it behaves as **21.349**
the specifying moment of a new measure-relation. Its quality is enveloped in the quantitative element; it is therefore equally indifferent towards the

other measure, continuing in it and in the newly formed measure. The exponent of the new measure is itself only some quantum or other, an external determinateness, and its indifference is displayed by the fact that the specifically determined something runs, with other such measures, into precisely the same kind of neutralizations of reciprocal measure-relations; the specific property of the something is not expressed in the one measure-relation alone which is formed by it and another something.

2. This combination with a plurality of others which are in themselves likewise measures yields different ratios that therefore have different exponents. The measure which is independent has the exponent of its being-determined-in-itself only in the comparison with other measures; neutrality with the others constitutes, however, its real comparison with them; it is its comparison with them through itself. The exponents of these ratios are however diverse, and the independent measure consequently displays its qualitative exponent as the *series* of these *different amounts* of which it is the unit – a *series of specific ways of relating to others*. As *one* immediate quantum, the qualitative exponent expresses one single relation. The independent measure truly differentiates itself in the *characteristic series* of exponents which it, taken as a unit, forms with other equally independent measures; for each of these measures, also brought in connection with any other and taken as a unit, forms another series. – The relation of such series among themselves now constitutes the qualitative aspect of the independent measure.

Now inasmuch as this independent measure produces a series of exponents with a series of such independent measures, it appears at first, when *compared* with another independent measure outside this series itself, that it is differentiated from it by virtue of the fact that this other independent measure produces another series of exponents with the same measures opposite to it. But in this way these two independent measures would not be *comparable* – not in so far as each is regarded as a *unit* with respect to
21.350 its exponents, and the two series thus resulting on the basis of this connection of unit and exponents do *not differ in any determinate way*. The two measures which, as independent, are supposed to be compared, are at first differentiated from each other only as quanta; in order that their ratio be determined, the ratio requires a unit which exists for itself and is common to both. This determinate unit is to be sought, as shown, only where the specific existence of the two independent measures to be compared is to be found, namely in the ratio which the exponents of the ratio of the series have to each other. But this ratio of the exponents is itself a unit existing for itself and in fact determinate only in so far as the members of

the series have it as a *constant* ratio between them; in that way it can be *their common unit*. In it alone, therefore, lies the possibility of comparing the two independent measures which were assumed not to neutralize each other but to be rather reciprocally indifferent. Each, taken by itself outside the comparison, is the unit of the ratios that it establishes with the opposite members: these are the amounts relative to this unit and hence represent the series of exponents. But conversely, this series is the unit for the two independent measures which when compared with each other are as quanta to each other; as such they are themselves different amounts of their just indicated unit.

But further, the measures which together with the two or rather indefinitely *many* reciprocally opposing and contrasting measures yield the series of the exponents of the ratio of these same measures, are equally independent in themselves; each is a specific something with its own relevant measure-relation. To this extent, they are similarly to be taken each as a unit so that they have a series of exponents in the two or rather the indeterminate plurality of measures, which are first named and compared only among themselves, and these exponents are the comparative numbers of precisely these named measures; conversely, the comparative numbers of the independent measures now taken singly are similarly the series of the exponents for the members of the first series. In this way, both sides are **21.351**
a series in which, *first*, each number is simply a unit with respect to the opposite series in which it has its specifically determined being as a series of exponents; *second*, each number is itself one of the exponents for each member of the opposite series; and, *third*, it is a comparative number for the rest of the numbers of its series and, as such an amount which belongs to it also as an exponent, it has its unit, determined for itself, in the opposite series.

3. In this relation there is a return to the mode in which quantum was posited as existing for itself, namely as degree, as being simple and yet having the magnitude of its determinateness in a quantum that exists outside it, one which is a circle of quanta. In measure, however, this externality is not merely a quantum and a circle of quanta, but a series of numerical ratios, and it is in the entirety of these that the being-determined-for-itself of measure lies. Just as it is the case in the being-for-itself of quantum as degree, the nature of the independent measure has turned into this self-externality. Its self-reference is at first an *immediate* relation, and by that very fact its indifference to an other lies only in the quantum. Hence its qualitative side falls in this externality, and *its relating to the other* becomes that which constitutes the specific determination of this independent measure. Such a

determination thus consists solely in the quantitative mode of this relating, and this mode is determined just as much by the other as by the measure itself, and this other is a series of quanta while the measure, for its part, is one such quantum. But this connection in which two specific measures specify themselves in a third thing (the exponent) further entails that, in the exponent, the one measure has not gone over into the other; that there is not, therefore, only *one* negation, but that in the connection *the two* measures are rather each negatively posited, and since each preserves itself in it indifferently, their *negation* is itself also *negated*. This, their qualitative unity, is thus an *exclusive* unit existing for itself. It is only in this moment
21.352 of exclusion that the exponents, at first comparative numbers, first gain in them the determinateness truly specifying them reciprocally and their difference thus becomes of qualitative nature. But such a difference has a quantitative basis: *first*, the independent measure relates to a *plurality* of its qualitatively other side only because in this relating it is at the same time indifferent; *second*, this neutral connection is in virtue of its quantitative basis not only alteration but is now posited as a negation of the negation and as exclusive unit. Consequently, the *affinity* of an independent measure with the plurality of measures of the other side is no longer an indifferent connection but an *elective affinity*.

c. Elective affinity

The expression *elective affinity* used here refers to a *chemical* relation, as also do the preceding *neutrality* and *affinity*. For in the chemical sphere a matter receives its specific determinateness essentially in the connection with its other; it exists concretely only as this non-indifference. Moreover, this specific connection is bound up with quantity and is at the same time not only a connection with a single other, but with a series of such non-indifferent matters standing over and against it; combinations with this series rest on a so-called *affinity* with *every* member of the series, even though in this indifference each member excludes every other. We now have to consider this connection of opposite determinations. – But it is not just in the chemical sphere that specificity is exhibited in a circle of combinations; the meaning of a single note also depends on its relation to, and combination with, another note and a series of other notes; the harmony or disharmony in such a circle of combinations constitutes its qualitative nature which is at the same time based on quantitative ratios that form a series of exponents, and the ratios of the two specific ratios is what each of the combined notes is within it. The single note is the

keynote of a system, but at the same time also one member in the system of every other note. The harmonies are exclusive elective affinities whose **21.353** characteristic quality, however, equally dissolves again in the externality of a mere quantitative progression. – Where to find, however, the principle of a measure for such affinities which among others and against others (whether chemical or musical or whatever) are elective affinities, on this more will be said in the following Remark in connection with chemical affinity; but this is a question of a higher order which is very closely bound up with the specific nature of what is strictly qualitative and belongs to particular parts of the concrete science of nature.

Inasmuch as the member of a series has its qualitative unity in the way it relates to the whole of an opposite series, the members of which differ from each other only by virtue of the quantum required for being neutralized with that member, the more specific determinateness in this manifold affinity is likewise only quantitative. In elective affinity which is an exclusive, qualitative connection, the relating escapes this quantitative difference. The next determination which offers itself is this: that in accordance with the difference in the number, hence *the extensive* magnitudes, of the members of one side required for the neutralization of a member in another side, the elective affinity of this member would be directed to the members of the first series with all of which it has affinity. Thus transformed, the exclusion that would thereby be established in the form of a *firmer* bonding against other possibilities of combination would appear in a proportionally greater *intensity*, in keeping with the previously demonstrated identity of the forms of extensive and intensive magnitude,[21] inasmuch as the determinateness of magnitude is in both one and the same. However, this sudden conversion of the one-sided form of extensive magnitude also into its other, the intensive form, changes nothing in so far as the nature of the fundamental determination is concerned, which is one and the same quantum. In fact, therefore, no exclusiveness would thereby be posited, but instead of one single bonding a combination of any number of members could just as well take place, provided that the portions of such members entering into the combination corresponded to the required quantum proportionately to the ratios between them.

But the combination which we have also called neutralization is not only the form of intensity; the exponent is essentially a determination of measure and, as such, exclusive. On this side of exclusive relating, numbers have lost their continuity and their tendency to combine; their relating is one of *more*

[21] Cf. above, 21.212.

or *less*, and this acquires a negative character; and the *advantage* that one exponent has over another does not remain confined to the determinateness
21.354 of magnitude. Also equally present is the other side which makes it again a matter of indifference to a moment of measure whether it receives its neutralizing quantum from several opposite moments, from each according to the determinateness that specifies it as against an other; the exclusive, negative relating is at the same time vulnerable to this incursion of the quantitative side. – What is posited here is thus the sudden conversion of an indifferent, merely quantitative relating into a qualitative one, and conversely the transition of a specifically determinate being into merely external relation – a series of relations, sometimes of a merely quantitative nature, sometimes specific relations and measures.

Remark

Chemical matters are the most characteristic examples of such measures, which are moments of measure and receive their determination solely in relating to other moments. Acids and alkalis or bases generally appear to be things which are immediately determined in themselves; but they are rather incomplete elements of bodies, components which *in concreto* do not truly exist for themselves but for which to exist is to sublate their isolated subsistence by binding with some other component. Further, the difference in virtue of which they are *self-subsistent* consists not in this immediate quality but in the quantitative mode of the relating. For that difference is not restricted to the chemical opposition of acid and alkali (or base) in general but is specified rather in a *measure of saturation*; it consists in the specific way the matters that neutralize each other are quantitatively determined. This quantity determination as defined by saturation constitutes the qualitative nature of a matter; it makes it into what it is for itself, and the number expressing it is essentially one of several exponents for an opposite unit. – A matter of this kind has a so-called affinity with another. If this connection remained of a purely qualitative nature, then,
21.355 like the connection between the magnetic or the electrical poles, the one determinateness would be only the negative of the other, and the two sides would simultaneously show themselves not to be indifferent to each other. But since the connection is also of a quantitative nature, each of these matters is capable of neutralizing itself with any of *several* matters and is not restricted to the one to which it stands opposed. The relation is not just between acid and alkali (or base), but between acids and alkalis (or bases). They do momentarily acquire distinctive character according as one acid, for instance, requires more of an alkali in order to achieve saturation with

it than another; but the evidence that they have self-subsistent existence for themselves lies in the relation between the affinities, which is exclusive, one showing that it has a preference over another in that one acid can as such bond with any alkali, and conversely. Thus the chief difference between two acids depends on whether it has a closer affinity to one base than another, that is, whether it has a so-called elective affinity with it.

According to the law which has been found to govern the chemical affinities of acids and alkalis, when two neutral solutions are mixed and the result is a separation followed by two new compounds, these products are likewise neutral. It follows from this that the amounts of two alkali bases required for the saturation of an acid must be in *the same ratio* for the saturation of another acid; in general, granted an alkali as unit, if the *series of numerical ratios* in which various acids saturate it is established, then this series is the same for any other alkali, except that the various alkalis are to be taken in different relative amounts – and these amounts, for their part, again form an equally stable series of exponents for each of their opposite acids, for they stand to each in just the same ratio as to any other. – Fischer was the first to extract these series in their simplicity from the works of Richter (see his notes to the translation of Berthollet's treatise on the laws of affinity in chemistry, p. 232, and Berthollet's *Statique chimique*, Part I, p. 134ff.).[22] – Since these works, our knowledge of the numerical ratios of mixtures of chemical elements has been greatly extended in all direc- **21.356**
tions, and to want to review it here would be a digression, all the more so because this empirical and in part also only hypothetical expansion does not exceed the original conceptual framework. We may however add a few comments concerning the categories used, as well as concerning the views on chemical affinity itself and its connection with quantitative determination, and the attempt to base the affinity on specifically determined physical qualities.

It is well known that Berthollet modified the broad conception of elective affinity by the concept of the effectiveness of *a chemical mass*. It is worth noting that this modification does not have any effect on the quantitative

[22] Ernst Gottfried Fischer (1754–1831?), professor of physics at Berlin and translator in 1802 of Claude Berthollet's *Recherches sur les lois de l'affinité*. He summarized the results of Richter's observations by expounding them in tables in his notes to the translation.

Jeremiah Benjamin Richter (1762–1807), assessor of mines and chemist in Berlin. He is responsible for establishing the law of definite proportions (stoicheiometry), which was instrumental in formulating the theory of atoms. He first published his views in three volumes, *Stochiometrie oder Meßkunst chemischer Elemente* (1792–1794).

Claude Louis Berthollet (1748–1822), one of the founders of the École polytechnique and Professor at the École normale supérieure de Paris. He expounded his view on chemical affinities in two volumes, *Recherches sur les lois de l'affinité* (1802) and *Essai de statique chimique* (1803).

ratios of the chemical laws of saturation but weakens the qualitative moment of exclusive elective affinity as such to the point of sublating it. If two acids and one alkali react, and the one acid of which it is said that it has a greater affinity with the alkali is also present in a quantum sufficient to saturate the quantum of the base, then according to the concept of elective affinity this is the only saturation that results; the other acid remains quite ineffective, excluded from the neutral bonding. According to the concept of the effectiveness of a *chemical mass*, on the contrary, each acid is effective in a proportion established on the basis of their given amounts and their saturating capacity or so-called affinity. Berthollet's investigations have identified the more detailed circumstances under which the effectiveness of the chemical masses is sublated and one acid (the one with the stronger affinity) seems to drive out the other (with the weaker affinity) and to *shut out* its effect, thus to behave in the sense of elective affinity. Berthollet has shown that it is *circumstances* such as the strength of cohesion, the insolubility in water of the compounded salts, which condition the occurrence of this shutting out, not the qualitative *nature* of the agents as such, and the effect of these circumstances can in turn be sublated by other circumstances, as for instance by temperature. With the removal of the circumstances, the effectiveness of the chemical mass proceeds unimpeded and what appeared as a purely qualitative exclusion, an elective affinity, proves to rest on only external modifications.

It is Berzelius especially who should be heard further on this subject.[23]
21.357 But in his *Textbook of Chemistry* he fails to present anything original or more determinate on the matter. Berthollet's views are taken up and repeated word by word, only outfitted with a metaphysics typical of uncritical reflection, and all that we are thus offered for closer inspection is just the categories of this metaphysics. The theory departs from experience and does both, fabricates sense-representations such as are not given in experience itself and applies thought determinations, in either case exposing itself to logical criticism. On this score, we want to take a look at what it says about the theory in the *Textbook* itself (Vol. III, Section I, Wöhler's translation, pp. 82ff.).[24] We now read there "that one *must imagine* that in a uniformly mixed liquid each atom of the dissolved body is *surrounded* by an *equal number* of *atoms* of the solvent; and if several substances are jointly

[23] Jöns Jakob Berzelius (1779–1848), Swedish chemist responsible for the introduction of modern chemical notation. After being appointed professor at the Karolinska Institute in Stockholm (1807), he published a three-volume *Textbook of Chemistry* (1808–1828).

[24] See Jöns Jakob Berzelius, *Lehrbuch der Chemie*, Vol. 3, translated by F. Wöhler (Dresden, 1827), pp. 82–83.

dissolved, they must *share among them* the *intervening spaces* between the atoms of the solvent, so that, granted a uniform mixture of the liquid, a *symmetry* is produced *in the disposition* of the atoms in such a way that *all the atoms* of each individual body find themselves *uniformly disposed* with reference to *the atoms* of the other bodies; it could therefore be said that the solution is characterized by the *symmetry in the position* of the atoms, and the *combination by the fixed proportions*." The claim is then elucidated by the example of the compounds precipitated from a solution of copper chloride when sulphuric acid is added to it. But surely the example does not demonstrate that *atoms* exist; or that a number of atoms of the dissolved bodies *surround* the atoms of the fluid, the free atoms of both acids *positioning* themselves around those that remain in combination (with copper oxide); or that there is actually a *symmetry in their position and disposition* or, for that matter, that there are intervening spaces between atoms – least of all, that the dissolved substances *share among them these intervening spaces* between the atoms of the solvent. This would mean that the loose atoms take up their position where *the* solvent is *not* – for the intervening spaces in the solvent are spaces *void* of it – consequently that the dissolved substances are *not* in the solvent but *outside it* – even though they surround and besiege it or are surrounded and besieged by it – and of course that they are not dissolved by it. One fails to see, therefore, why one would have to entertain such *representations* which are not evident in experience, are essentially contradictory on the face of it, and remain uncorroborated otherwise. Corroboration could come only by **21.358**
a consideration of these representations themselves, that is, by metaphysics, which is logic; but logic does not confirm them any more than experience does – on the contrary! And Berzelius does admit what was also said above, that Berthollet's propositions are not opposed to the theory of determinate proportions. He of course adds that they are also not opposed to the views of corpuscular theory, that is, to the just mentioned images of atoms, of the filling of the *intervening spaces* in the solvent by the atoms of the solid bodies, and so on. But these are a baseless metaphysics that has essentially nothing to do with the propositions of saturation as such.

The essential point expressed by the laws of saturation thus concerns only the *amount* of units themselves quantitative (not atoms), the units of a body with which the quantitative *unit* (equally not an atom) of another body chemically different from the first is neutralized; the difference consists in these different proportions alone. When Berzelius, then, despite the fact that his whole theory of proportions is only a determination of *amounts*, nevertheless speaks of *degrees* of affinity (e.g., p. 86) in explaining

Berthollet's *chemical mass* as the sum of the *degree of affinity* resulting from the given quantity of the active body, whereas Berthollet is more consistent in using the expression *capacité de saturation*, he thereby himself lapses into the form of *intensive magnitude*. But this is the form characteristic of the so-called *dynamic* philosophy which he earlier calls "the speculative philosophy of certain German schools" (p. 29, *loc. cit.*) and vehemently rejects in favor of the superb "corpuscular theory." Of this dynamic philosophy he states in the same passage that it assumes that the elements *interpenetrate* one another in their chemical union, and that the neutralization consists in this *reciprocal interpenetration*; this means nothing else than that the chemically different particles that stand opposite as *aggregate* merge into the simplicity of an *intensive* magnitude, something also attested by the diminution of volume. In the corpuscular theory, on the contrary, the chemically *bonded* atoms are also supposed to be retained in the intervening spaces, that is, *outside each other* (juxtaposition); in this relationship, which is one of only extensive magnitude, of never ending *aggregation*, *degree* of affinity has no meaning. Still in the same place, when it is said that for the dynamic viewpoint the phenomena of determinate proportions were quite an unforeseen event, the answer would be that this is only an external, historical circumstance, were it not that Richter's stoicheiometric series were already known to Berthollet from Fischer's summary and were cited in the first edition of this Logic[25] where the nullity of the categories on which the old as well as the would-be new corpuscular
21.359 theory rest is demonstrated. But Berzelius is wrong in believing that on "the dynamic view" the phenomena of specific proportions "would have remained forever unknown" – meaning that that view is incompatible with the determinateness of proportions. This determinateness is in all cases only one of magnitude, whether in an extensive or an intensive form, so that, regardless of how much he stands by the first of these forms, that of aggregation, even Berzelius himself uses the representation of degrees of affinity.

Since the affinity is thereby reduced to a quantitative distinction, it is sublated as elective affinity; but the moment of *exclusivity* present in it is traced back to circumstances, that is, to determinations that appear to be external to the affinity, to cohesion, to the insolubility of the compounds produced, and so on. Some comparison can be drawn here with the treatment of the effect of gravity on the moving pendulum. The pendulum necessarily comes to a state of rest because of the direct effect of gravity, yet

[25] Cf. GW 11, 213.

this same effect is taken as due to the concomitant external circumstance of air resistance, thread, etc., and is ascribed to *friction* alone instead of gravity. – Here, so far as the nature of the *qualitative* element present in elective affinity goes, it makes no difference whether this element appears in the form of circumstances conditioning it, and is so interpreted. A new order begins with the qualitative element as such, the specifying of which is no longer just a quantitative distinction.

Accordingly, although there is a well-established and precise difference between chemical affinity in a series of quantitative ratios and elective affinity as an emerging qualitative determinateness, the behavior of which in no way coincides with the order of that series, this difference has again been thrown into utter confusion by the way in which chemical behavior has in recent times been combined with *electrical* behavior, and the hope of explaining from this supposedly profounder principle the most important of relations, that of measure, has been wholly disappointed. Inasmuch as this theory in which the phenomena of electricity and of chemism are fully *identified* deals with things physical and not just with ratios of magnitude, we need not consider it here in close detail; we only have to bring it up inasmuch as it confuses the principle for differentiating the determinations of magnitude. The theory deserves to be called shallow, for shallowness consists in taking different things as identical by omitting their difference. As for affinity, since the theory identifies chemical with electrical processes, these last including the phenomena of fire and light, it is reduced "to the **21.360** neutralization of opposite electricities." It is almost comical to find the identification itself of electricity and chemism stated as follows (*loc. cit.*, p. 63): "the electrical phenomena indeed explain the effect of bodies at a greater or lesser distance, their *attraction before* union (that is, a behavior which is *not yet* chemical), as well as the *fire*(?) resulting from this union, but they yield *no information* regarding what causes the *union of bodies which persists* with so great a strength *after the removal* of the *state of electrical polarization*"; that is, the theory informs us that electricity is the cause of chemical behavior but gives us no information regarding what is chemical in the chemical process. – The chemical difference being reduced to the opposition between positive and negative electricity, the difference in affinity between the agents falling on either side is determined as the order of two series of electro-positive and electro-negative bodies. What is already being overlooked in this overall identification of electricity and chemism is that electricity in general, and its neutralization, is a *transient* phenomenon, one that remains *external* to the quality of bodies, whereas chemical action, and especially its neutralization, *is directed to* and *alters*

the *whole* qualitative nature of the bodies. Equally transient in electricity is its opposition of positive and negative – so unstable that it is subject to the slightest external circumstances and can in no way be compared to the determinateness and stability of the opposition of acids to metals, for example, and so forth. The volatility that can occur in chemical behavior because of extremely violent influences, e.g. because of raised temperature, is not comparable to the superficiality of electrical opposition. And the further difference *inside the series* of each of the two sides, between a more or less positive or a more or less negative disposition, is just as entirely uncertain as it is entirely unconfirmed. Yet it is from these series of bodies (Berzelius, *loc. cit.*, p. 64ff.), "in accordance with their electrical dispositions," that "we can expect the electro-chemical system which is best suited to yield an *idea of chemistry*." But how these series which are only alleged here are in fact constituted, regarding this point it is added on p. 67 "that such is *approximately* the order of these bodies, but so little research
21.361 has been done into this matter that *nothing altogether certain* can yet be ascertained regarding this relative order." – Both, the numerical ratios (first made by Richter) of the series of affinities as well as the highly interesting reduction established by Berzelius of the combinations of two bodies to the simplicity of a few quantitative ratios, are totally independent of that supposed electrochemical concoction. If the experimental procedure has been the right guiding star in the theory of proportions and the extension it has won on all sides since Richter, then all the more does the mixture of these great discoveries contrast with the wasteland of the so-called corpuscular theory, which lies outside the path of experience; only this forsaking, at the start, of the principle of experience could have motivated taking up again the notion, already advanced earlier especially by Ritter,[26] of establishing fixed orders of electro-positive and electro-negative bodies which would have chemical meaning at the same time.

The assumption of a basis for chemical affinity in the opposition of electro-positive and electro-negative bodies, even if such an opposition had more to recommend it factually than it does, reveals its nullity even experimentally, and this then leads to further inconsistency. It is admitted on p. 73 (*loc. cit.*)[27] that two so-called electro-negative bodies such as sulphur and oxygen combine in a much more intimate way than, for

[26] Johann Wilhelm Ritter (1776–1810), born in Silesia, later in life professor at the Bavarian Academy of Science and a member of the Munich Academy of Science. Among his accomplishments, he discovered ultraviolet radiation and formulated the basic concepts of electrolysis and electroplating. Hegel is referring to his textbook, *Das elektrische System der Körper. Ein Versuch* (Leipzig, 1805).

[27] Hegel is referring to Berzelius's textbook of chemistry.

instance, oxygen and copper, although the latter is electro-positive. The basis for the affinity founded on the general opposition of negative and positive electricity must here give way, therefore, to a mere "more or less" within one and the same series of electrical determinateness. From this it is concluded that the *affinity* of bodies does not therefore depend solely on their specific *unipolarity* (it does not matter with which hypothesis this determination is associated; it applies here only for the "either" of the positive and the "or" of the negative); the affinity must in essence be derived from the *intensity of their polarity* in general. Here the consideration of affinity thus broaches the relation of *elective affinity*, which is our principal interest; let us now see how it fares. It is immediately granted (*loc. cit.*, p. 73) that the *degree* of this polarity, if it does not exist only in our imagination, seems *not* to be *a constant* quantity but to depend rather very much on temperature. Accordingly, the upshot is not only that every chemical effect is *fundamentally an electrical* phenomenon, but also that what seems to be the effect of the so-called *elective affinity* is produced *only* by an *electrical* **21.362** *polarity* which in certain bodies is found to be *stronger* than in others. The conclusion then after so many twists and turns of hypotheses is that we have not gone past the category of *greater intensity*, which is the same formal determination as elective affinity in general; and since the latter is made to rest on a greater intensity of electrical polarity, it does not take us a whit closer to a physical basis. But even what is here supposed to be determined as a greater specific intensity is later reduced to just the already cited modifications which Berthollet demonstrated.

Berzelius's merit and fame because of his theory of proportions which has been extended to all chemical relations ought not by themselves to stand in the way of criticizing the poverty of the theory; but a more pressing reason for doing so must be the circumstance that the merit which one side of a science deserves (such as Newton's) normally lends *authority* to a whole unfounded structure of bad categories associated with it, and it is precisely this metaphysics which is proclaimed and circulated with the greatest pretension.

Besides the forms of measure-relation connected with chemical and effective affinity, others could also be considered with respect to quantities which are qualitatively specified into a system. Chemical bodies form a system of relations with respect to saturation; the saturation itself rests on the determinate proportion in which the two reciprocal amounts bind together, each with a particular material concrete existence as against the other. But there are also measure-relations, the moments of which are indivisible and cannot be displayed as existing each on its own, each

different from the other. These are what we called earlier[28] the *immediate independent* measures and are attested in the *specific weights* of the bodies. – They are inside the bodies a ratio of weight to volume; the exponent of the ratio, which defines the difference between one specific weight and another, is a determinate quantum only by way of *comparison*, and this is a relation which is external to the bodies, founded on external reflection and not on a body's typical qualitative way of relating to an opposite concrete existence.

21.363 The task would be to make out the exponents of the ratios of the *series of specific gravities* as a *system* governed by a *rule* specifying an otherwise merely arithmetical plurality as a series of harmonic nodes. – The same demand would apply to the discovery of the series of the chemical affinities already mentioned. But science still has far to go before reaching this goal, just as far as would be required to collect the numbers of the distances of the planets within the solar system into a system of measure.

Although the specific gravities do not seem at first to stand in any qualitative relation to one another, they nonetheless likewise enter into qualitative connection. When bodies bond chemically, even if only as amalgams or synsomates, there is likewise evidence of a *neutralization* of specific gravities. We earlier[29] called attention to the phenomenon that the volume of a mixture, even of materials which truly remain chemically indifferent to each other, is not the same as the sum of the volumes prior to the mixture. In the mixture, the quantum of the specific gravity with which the materials entered into connection is reciprocally modified, and this is evidence that they relate to each other qualitatively. Here the quantum of the specific gravities is expressed not merely as a fixed *comparative number*, but as a *numerical ratio* which is variable; and the exponents of the mixtures yield series of measures which are governed by some other principle than the numerical ratios of the specific gravities bonded together. The exponents of these ratios are not exclusive determinations of measure; their progression is continuous but holds within it a specifying law which is different from the reflectively formal progression of the ratios in which the amounts are combined and makes the former progression incommensurable with the

21.364 latter.

b. nodal lines of measure-relations

The last determination of the measure-relation was that, as specific, it is *exclusive*; exclusiveness accrues to neutrality as a *negative* unity of the distinct moments. For this unity *existing for itself*, for this elective affinity, no

[28] Cf. above, 21.346. [29] Cf. above, 21.349.

further principle has become available specifying its connection with other neutralities; the specification resides only in the quantitative determination of affinity in general, according to which it is specific amounts that neutralize themselves and consequently stand opposed to other relative elective affinities of their moments. But further, because the basic determination is quantitative, the *exclusive* elective affinity *continues* also into these opposite neutralities, and this continuity is not just an external comparative connection of the different ratios of the neutralities but the neutrality, as such, has an element of *separability* in it, for it is as self-subsisting somethings that the moments from whose union it has come to be enter into connection with one or the other of the opposite series: they enter into the connection indifferently, even though they combine in different specific determinate amounts. This measure, internally based on such a relation, is for this reason affected by an indifference of its own; it is something which is external within and alterable in its reference to itself.

This *self-reference* of the measure-relation differs from the externality and alterability which belong to its quantitative side. In contrast to these, its self-reference is an existent qualitative foundation – a permanent, material substrate which, since it is also the continuity of the measure *with itself* in its externality, would have to contain in its quality the said principle of specification of this externality.

Now in more developed form, as external to itself in its being-for-itself, the exclusive measure repels itself from itself and posits itself both as another merely quantitative relation and as another relation which is as such at the same time another measure; it is determined as in itself a specifying unity which produces measure-relations within itself. These relations differ from affinities of the kind mentioned above in which an independent measure relates itself to independent measures of another quality and to a series of these. They occur in *one and the same* substrate within the same moments of the neutrality; the self-repelling measure takes on the determination of **21.365** other only qualitatively diverse relations, and these relations likewise form *affinities* and *measures*, *alternating* with those that remain only *quantitative diversities*. They form in this way a *nodal line* of measures on a scale of more and less.

Here we have a measure-relation, a self-subsistent reality qualitatively distinguished from others. Such a being-for-itself, since it essentially is at the same time a relation of quanta, is open to externality and quantitative alteration; it has a margin within which it remains indifferent to this alteration and does not alter its quality. But there comes a point in the quantitative alteration at which this quality alters and the quantum shows

itself to be specifying, so that the altered quantitative relation is suddenly turned into a measure and thereby into a new quality, a new something. The relation that has now replaced the first is determined by the latter, both because of the qualitative sameness of the moments which are in affinity and because of the quantitative continuity. But since the distinction falls on the side of this quantitative moment, the new something stands indifferently related to the preceding one; the difference between the two is the external one of quantum. The new something has not therefore emerged out of the preceding one; it has emerged rather immediately from itself, that is, from the internal specifying unity which has not yet entered into existence. – The new quality or the new something is subjected to the same progression of alteration, and so on, into infinity.

Inasmuch as the advance from a quality proceeds in the steady continuity of quantity, the ratios approaching the one qualifying point are distinguished, quantitatively considered, by a more or less. In this respect, the alteration is a *gradual* one. But the gradualness concerns merely the externality of the alteration, not its qualitative moment; the preceding
21.366 quantitative relation, though infinitely near to the succeeding one, is still another qualitative existence. From the qualitative side, therefore, the gradual, merely quantitative progression which has no limits in itself, is absolutely interrupted; and since in its merely quantitative connection the newly emerging quality is with respect to the vanishing one an indeterminate other, one which is indifferent to it, the transition is a *leap*; the two are posited as wholly external to each other. – It is a favorite practice to try to make an alteration *conceptually comprehensible* by the gradualness of the transition leading up to it; but gradualness is rather alteration precisely as merely indifferent, the opposite of a qualitative alteration. Rather, in gradualness the connecting link between two realities – be they states or self-subsistent things – is sublated, what is posited is that neither reality is the limit of the other, but that each is absolutely external to the other. Thus, the very point necessary for the *conceptual comprehension* of the alteration is missed, although little enough is required for that purpose.

Remark

The system of natural numbers already exhibits a *nodal line* of qualitative moments which issue in a merely external progression. In one respect, this progression is a merely quantitative running back and forth, a constant adding and subtracting, each number standing in the same *arithmetical* relation to the one preceding or following it as this last stands to the one preceding or following it in turn, and so on. But the numbers that thus

arise also stand to the others that either precede or follow them in some *specific* relation, whether as a multiple of one of them expressed in the form of a whole number, or as a power or root. – In the quantitatively measured scale of *musical* relations, a quantum[30] gives rise to a relation of harmony in the progression of notes without that quantum having on the scale any other relation to the preceding and the succeeding ones than these have in turn to those preceding and following them. The notes that follow seem increasingly to recede from the keynote, or numbers to become just other numbers in their arithmetical advance. Yet a *turning back* suddenly breaks out, a surprising accord for which there was no qualitative preparation in **21.367** what immediately went before, but which appears rather to be an *actio in distans*, a connecting reference to something far removed. The succession of merely indifferent relations which neither alter the preceding specific reality nor otherwise form any such reality, is suddenly interrupted; and while from the standpoint of quantity the succession proceeds in the same manner, a specific relation breaks in through a leap.

Nodes and leaps of this kind occur in *chemical combinations* as the proportions in the mixtures are progressively altered; at certain points on the scale of mixtures, two materials yield products that exhibit particular qualities. These products do not differ by a mere more or less; nor are they already present at the proportions closest to their nodal points perhaps in an only weaker degree; the bonding rather occurs at just these points. For instance, oxygen and nitrogen yield in combination different oxides of nitrogen and different nitric acids exhibiting essentially different qualities only at specific mixture-proportions, without any specific bonding occurring in between. – Metal oxides, e.g. the lead oxides, are formed at certain quantitative points of oxidation and are distinguished by colors and other qualities. They do not pass into one another gradually; the proportions lying in between those nodal points yield nothing neutral, no specific existence. A combination which specifically depends on a measure-relation occurs without having passed through the in-between stages and displaying qualities characteristically its own. – Or take water. As it alters in temperature, it does not become just more or less warm, but passes through the states of solid, liquid, and vapor; and these different states do not occur gradually, but, on the contrary, even the otherwise merely gradual increase in temperature is interrupted and inhibited at these points: the irruption of another state is a leap. – Every *birth* and every *death*, far from being a

[30] *Quantum.*

protracted gradualness, is rather its breaking off and a leap from quantita-
21.368 tive into qualitative alteration.

Natura non facit saltum, as the saying goes; and ordinary thinking, when confronted by a *coming-to-be* or a *passing-away*, believes that it has comprehended it conceptually by representing it, as we said,[31] as a *gradual emerging* or *vanishing*. But we have seen[32] that the alterations of being in general are not only the passing over of a magnitude into another magnitude, but the transition from the qualitative into the quantitative and contrariwise, a becoming-other that interrupts gradualness and stands over against the preceding existence as something qualitatively other. Water, in cooling, does not become hard a bit at a time, as if it became first like a porridge and would then gradually harden to the consistency of ice, but is hard all at once; it can persist in fluid state even at freezing temperature if it stands still, but then the least disturbance brings it to the state of solid.

The belief that coming-to-be is gradual is based on imagining that what *comes to be* is already *present* to the senses or is in principle *actual*, only so small that it *still escapes perception*. And so too for the gradual vanishing of something, what is imagined is that the *non-being* or the *other* which is to take its place is likewise *there*, but *is not yet detectable* – is *there*, not in the sense that this other is *in itself* contained in the present other, but that it *exists there*, only undetectably. In this way, coming-to-be and vanishing are in principle done away with, or the existence which something has *in principle*, still undisplayed, before actually existing is transformed into a *smallness of eternal existence*, and the essential conceptual difference into a difference of mere magnitude. – Explaining coming-to-be and vanishing from the gradualness of alteration suffers from the tediousness typical of any tautology; the coming-to-be and the vanishing are presupposed as ready-made beforehand and the alteration is reduced to the mere mutation of an external difference, and in this way the change becomes in fact only a tautology. The difficulty confronting an intellect intent on this kind of explanation lies in the qualitative transition from a something into its other
21.369 in general and into its opposite – a difficulty which the intellect meets by pretending that *identity* and *alteration* are the indifferent external identity and alteration of the *quantitative* sphere.

In *moral matters*, inasmuch as they are treated in the sphere of being, there occurs the same transition of the quantitative into the qualitative; different qualities appear to be based on a difference of magnitude. It is by a more and less that the measure of frivolous delinquence is overstepped

[31] Cf. above, 21.365–366. [32] Cf. above, 21.320.

and something entirely different comes irresistibly the scene, namely crime which makes right into wrong and virtue into vice. – Thus states, too, acquire through their quantitative difference, other things being assumed equal, a different qualitative character. The laws and the constitution of a state alter in character whenever its territory and the number of its citizens expand. A state has its own measure of magnitude and, if this measure is trespassed, it irresistibly disintegrates internally under the same constitution which, when with just different proportions, was the source of its good fortune and strength.

C. THE MEASURELESS

The exclusive measure, even in its realized being-for-itself, remains affected by the moment of quantitative existence and is therefore susceptible to the movement up and down the quantum scale of varying ratios. Something, or a quality, based on such a ratio is driven beyond itself into the *measureless*, collapsing under the mere mutation of its magnitude. Magnitude is that constitutional aspect where an existence can be caught up in an apparently harmless entanglement and be destroyed by it.

The abstract measureless is the quantum in general inasmuch as it lacks internal order and is only indifferent determinateness which does not alter measure. In the nodal lines of measures this determinateness is at the same time posited as specifying; the abstract measureless sublates itself into qualitative determinateness; the new measure-relation into which the original passes over is measureless with respect to the latter but, in it, **21.370**
it equally is a quality that exists for itself; what is thus posited is the alternation of specific existences with one another and equally of them with relations that still remain merely quantitative – an alternation *ad infinitum*. Therefore, present in this transition is both the negation of the specific relations and the negation of the quantitative progression; this is the *infinite* existing for itself. – In the sphere of existence, the *qualitative* infinite was the irruption of the infinite into the finite, the *immediate transition* and vanishing of the "this here" into its "beyond there." In contrast to it, the *quantitative* infinite is in its very determinateness the *continuity* of quantum, its continuing beyond itself. The qualitatively finite *becomes* infinite; the quantitatively finite is its beyond in it: it *points beyond itself*. But this infinite of the specification of measure *posits* both the qualitative and the quantitative as each *sublating* itself into the other, and it thereby posits their first immediate *unity*, which is measure in general, as returned into itself and consequently as itself *posited*. The transition of the qualitative, of one

specific concrete existence into another, is such that what happens is only an alteration of magnitude determinateness; the alteration of the qualitative as such into the qualitative is thus posited as an external and indifferent alteration, as a *coming together with itself*; the quantitative, for its part, sublates itself by suddenly turning into the qualitative, that is, a being which is determined in-and-for-itself. This unity which thus continues in itself in its alternating measures is the self-subsistent *matter* that truly persists, the *fact*.

What we have here is (α) one and the same substantial matter which is posited as the perennial substrate of its differentiations. This detaching of being from its determinateness already begins in quantum in general; something is *great* indifferently as against the determinateness it has. In measure, the persisting matter is itself already in itself the unity of the qualitative and the quantitative – the two moments into which the general sphere of being is distinguished, each as the beyond of the other; in this way the perennial substrate begins to possess in it the determination of an
21.371 existent infinity. (β) This self-sameness of the substrate is *posited* in that the qualitative independent measures into which the determining unit is dispersed consist of only quantitative differences, so that the substrate persists while being internally distinguished. (γ) In the infinite progression of the nodal series there is posited the continuation of the qualitative into the quantitative advance as into an indifferent alteration, but equally too, there is posited the *negation of the qualitative* contained in the progression and consequently, at the same time, of the merely quantitative externality. The quantitative pointing beyond itself to an other which is itself quantitative perishes with the emergence of a measure-relation, of a quality, and the qualitative transition is sublated in the very fact that the new quality is itself only a quantitative relation. This reciprocal transition into the other of the qualitative and the quantitative moments occurs on the basis of their unity, and the meaning of this process is only the *existence* which is the *demonstration* or the *positing* that such a substrate does underlie the process and is the unity of its moments.[33]

In the series of independent measure-relations the one-sided members of the series are immediate qualitative somethings (specific gravities or

[33] This is a reminder, at the end of the dialectic of being, that the task we have been performing all along, and are still engaged in at the moment, is to bring stability to the fluidity of becoming. We first did this with the category of "existence" or the "being this or that" (*Dasein*). That first determination has now developed into an objective structure with an internal distinction between a permanent substrate and all the other determinations introduced so far under the rubrics of "quality" and "quantity." This distinction will next develop into the distinction between essence and being.

chemical materials, bases or alkalis, acids, for instance), and their neutralizations (by which we must understand here also the combinations of materials of different specific gravities) are in turn self-subsistent and themselves exclusive measure-relations, mutually indifferent totalities existing for themselves. Such relations are now determined only as nodes of one and the same substrate. The measures and the self-subsistent forms posited with them are consequently demoted to *states*. Alteration is only the mutation of a *state*, and *that which passes over* is posited as remaining *the same* in the mutation.

In reviewing the progressive determination which measure has gone through, the moments of the progression can be summed up as follows. Measure is at first itself the *immediate* unity of quality and quantity in the form of a common quantum which is, however, specific. As a determinateness of quantity which does not refer to an other but refers to itself, measure is thus essentially a *ratio*. Consequently, it also holds its moments as sublated and unseparated in itself; as is always the case in a concept, the difference in the ratio is such that each of its moments is itself the unity of the qualitative and the quantitative moment. The difference is thus *real*, and it yields a multitude of measure-relations which, as formal totalities, are each self-subsistent in themselves. The series which form the two sides of these ratios are for each single member the same constant ordering **21.372** by which the member, as belonging to the one side, relates itself to the whole series standing opposite it. This ordering, although a mere *order*, a still wholly external unity, demonstrates itself to be, as the immanently specifying unity of a measure which has a determinate being-for-itself, distinguished from its specifications; but this specifying principle is not yet the free concept, which alone gives its differences an immanent determination; the principle is at first, rather, only a substrate, a matter, for whose differences, in order that they be totalities, that is, that they should have in themselves the nature of their stable, self-equal substrate, there is only available the external quantitative determination which shows itself at the same time to be a qualitative differentiation. In this self-unity of the substrate the determination of measure is a sublated determination, its quality an external state determined by quantum. – This course is equally the progressive determination of measure and its demotion to a moment.

CHAPTER 3

21.373

The becoming of essence

A. ABSOLUTE INDIFFERENCE

Being is abstract indifference, and when this trait is to be thought by itself as being, the abstract expression "indifferentness"[34] has been used – in which there is not supposed to be as yet any kind of determinateness. Pure quantity is this indifference in the sense of being open to any determinations, provided that these are external to it and that quantity itself does not have any link with them originating in it. The indifference which can be called absolute, however, is one which, *through the negation* of every determinateness of being, of quality and quantity and of their at first immediate unity, that is, of measure, *mediates itself with itself* to form a simple unity. Determinateness is in it still only a state, that is, *something qualitative and external* which has the indifference as a *substrate*.

But that which has thus been determined as qualitative and external is only a vanishing something; as thus external with respect to being, the qualitative sphere is the opposite of itself and, as such, only the sublating of itself. In this way, determinateness is still only posited in the substrate as an empty differentiation. But it is precisely this empty differentiation which is the indifference itself as result. And this indifference is indeed concrete, in the sense that it is self-mediated through the negation of all the determinations of being. As such a mediation, it contains negation and relation, and what was called "state" is a differentiation which is immanent to it and self-referring. It is precisely this externality and its vanishing which make the unity of being into an indifference: consequently, they are *inside* this indifference, which thereby ceases to be only a substrate and, *within*,

21.374 only abstract.

[34] *Indifferenz*. "Indifferentness" is recognized in the *OED*. I use it here because "-ness" is the normal way of creating abstract nouns in English, and in this passage Hegel stresses the abstractness of the term. I shall revert to the more common "indifference."

B. INDIFFERENCE AS INVERSE RATIO OF ITS FACTORS

We now have to see how this determination of indifference is posited in the indifference itself and the latter is posited, therefore, as *existing for itself*.

1. The reduction of at first independently accepted measure-relations establishes their *one substrate*; this substrate is their continuing into one another and is, therefore, the one indivisible independent measure which is *wholly* present in its differentiation. Present for this differentiation are the two determinations contained in the measure, quality and quantity, and everything depends on how these two are posited in it. But this is in turn determined by the fact that the substrate is at first posited as result and, though *in itself* mediation, this mediation is not yet posited as such *in it*; for this reason, it is in the first instance substrate and, with respect to determinateness, *indifference*.

Consequently, the difference present in it is at first essentially one which is only quantitative and external; there simply are two different quanta of one and the same substrate which would thus be *their sum*, itself posited as a quantum. But the indifference is this fixed measure, the implicitly existent absolute limit which, as *connected* to those differences, would not itself be in itself a quantum, and would not in any way enter into opposition with others, whether as sum or also as exponent, be those others sums or indifferences. It is only the abstract determinateness which falls into the indifference; the two quanta, in order that they may be posited in it as moments, are alterable, indifferent, greater or smaller relative to one another. However, inasmuch as they are restricted by the fixed limit of their sum, they are at the same time related to each other not externally, but negatively, and this is now the qualitative determination in which they stand to each other. Accordingly, they stand *in inverse ratio* to each other. This relation differs from the earlier formal inverted ratio[35] inasmuch as the limit is here a real substrate, and each of the two sides is posited as having to be *in itself* the whole.

According to the qualitative determinacy just stated, the difference is present, further, in the form of two qualities, each of which is sublated by the other and yet, since the two are held together in the one unity which they constitute, is inseparable from it. The substrate itself, as the indifference, is in itself likewise the unity of the two qualities; consequently, **21.375**
each of the sides of the relation equally contains both sides within itself and is distinguished from the other by a more of one quality and a less

[35] Cf. above, 21.314–318.

of the other, or conversely. The one quality, through its quantum, only predominates on the one side, as does the other quality on the other side.

Thus each side is in it an inverted relation which, as formal, recurs in the two distinguished sides. The sides themselves thus continue into each other also according to their qualitative determinations; each of the qualities relates itself in the other to itself and is present in each of the two sides, only in a different quantum. Their quantitative difference is that indifference in accordance with which they continue into each other, and this continuation is the self-sameness of the qualities in each of the two unities. – The sides, however, each containing the whole of the determinations and consequently the indifference itself, are thus at the same time posited as self-subsistent *vis-à-vis* each other.

2. As this indifference, being is now the determinateness of measure no longer in its immediacy but in the developed manner just indicated; it is indifference because it is *in itself* the whole of the determinations of being now resolved into this unity; and it is *existence* as well, as a totality of the posited realization, in which the moments themselves are the totality of the indifference existing in itself, sustained by the latter as their unity. But because the unity is held fast only as *indifference* and consequently only *implicitly in itself*, and the moments are not yet determined as *existing for themselves*, that is, are not yet determined as sublating themselves into unity *internally* and *through each other*, what is here present is therefore simply the *indifference* of the unity itself *towards itself* as a developed determinateness.

This thus indivisible independent measure is now to be more closely examined. It is immanent in all its determinations and in them it remains in unity with itself and undisturbed by them. But, (α) since the determinacies sublated in it *implicitly* remain the totality, they *emerge* in it groundlessly. The *implicit being* of indifference and its *existence* are thus unconnected; the determinacies show up in the indifference in an immediate manner and the indifference is in each of them entirely the same. The difference between them is thus posited at first as sublated, hence as *quantitative* – for this reason, therefore, not as a self-repelling; and the indifference not as self-determining, but as having and becoming the determinate being that it has only *externally*.

(β) The two moments are in inverse quantitative relation – a fluctuating on the scale of magnitude which is not however determined by the indifference, which is precisely the indifference of the fluctuation, but only externally. For the determining appeal is made to an other which lies outside the indifference. The *absolute*, as indifference, has in this respect the
21.376 second defect of *quantitative* form, namely that the determinateness of

the difference is not determined by the absolute itself, just as it has the first defect in that the differences *emerge* in it only in general, that is, the positing of them is something immediate, not a self-mediation.

(γ) The quantitative determinateness of the moments which are now *sides* of the relation constitutes the mode of their *subsistence*; their *existence* is by virtue of this indifference withdrawn from the transitoriness of quality. But they do have a subsistence of their own *in themselves*, one that differs from this quantitative existence, for they are *in themselves* the indifference itself, each the unity itself of the two *qualities* into which the qualitative moment splits itself. The difference of the two moments is restricted by the fact that the one quality is posited on the one side with a more and in the other with a less, and the other is posited in inverse order accordingly. Each side is thus in it the totality of the indifference. – Each of the two qualities taken singly for itself likewise remains the same sum which the indifference is; it continues from one side into the other without being restricted by the quantitative limit which is thereby posited in it. At this, the determinations come into immediate opposition, an opposition which develops into contradiction, as we must now see.

3. Namely, each quality enters *inside* each side in connection with the other, and it does so in such a manner that, as has been determined, this connection also is supposed to be only a quantitative difference. If the two qualities are both self-subsistent – something like sensible materials independent of each other – then the whole determinateness of indifference falls apart; their unity and totality would be empty names. But they are at the same time determined as comprised into one unity, as inseparable, each having meaning and reality only in this one qualitative connecting reference to the other. But now, *because their quantitativeness*[36] *is simply and solely of this qualitative nature, each reaches only as far as the other*. If they are assumed to differ as quanta, then the one would reach beyond the other and would have in this more an indifferent existence which the other would not have. As qualitatively connected, however, each is only in so far as the other is. – The result is that they are *in equilibrium*, so that to the extent that one increases or decreases, the other likewise increases or decreases and would do so in the same proportion. **21.377**

On the basis, therefore, of their *qualitative* connection, there is no question of a *quantitative* difference or of a *more* of the one quality. The more by which the *one* of the two connected moments would exceed the *other* would be only an unstable determination, or *would only be the other*

[36] *Quantitativität*.

itself again; but, in this equality of the two, neither would then be there, for their existence would have to rest on the inequality of their quantum. – Each of these supposed factors vanishes, whether the one factor is assumed to *exceed* the other or to be *equal* to it. From the standpoint of quantitative representation, the vanishing appears as a disturbance of the equilibrium, one factor becoming greater than the other; the sublation of the quality of the other and its instability are thus posited; the first factor becomes the predominant one as the other diminishes with accelerated velocity and is overcome by it; this in turn constitutes itself as the one self-subsistent factor; with this, however, there are no longer two specific moments as factors but only the one whole.

This unity thus posited as the totality of the process of determining, itself determined in this process as indifference, is a contradiction all around. It must therefore *be posited* as this self-sublating contradiction, and be determined as subsistence existing for itself, one which no longer has a merely indifferent unity for result but a unity immanently negative and absolute. This is *essence*.

Remark

The relation of a whole whose determinateness is to be had in the difference in magnitude of factors qualitatively determined against each other is used in the case of the elliptical movement of the celestial bodies. This example displays throughout only two qualities in inverse relation to each other, not two sides each of which would be itself the unity of the two and their inverse relation. The bare fact on which the theory is based is solid enough. But because of this solidity the consequence to which the theory
21.378 leads is overlooked, namely the wrecking of the bare fact itself on which it is based or, if this is held on to (as it ought), the trivialization of the theory *vis-à-vis* it. By ignoring the consequence, the fact and the theory contradicting it are left to rest untroubled side by side. – The bare fact is that in the elliptical movement of the celestial bodies their velocity accelerates as they approach perihelion and decreases as they approach aphelion. The quantitative side of this fact has been accurately established by the untiring diligence of observation and, further, it has been reduced to its simple law and formula. All that is legitimately required of a theory has thus been provided. But it did not seem sufficient to the reflection of the understanding. For the purpose of a so-called explanation of the phenomenon and its law, a *centripetal* and a *centrifugal* force have been assumed as the qualitative moments of movement along a curved line. Qualitatively, their difference lies in the contrariety of their direction;

quantitatively, granted that the two are unequally determined, in that as one increases, the other is supposed to decrease, and *vice-versa*; and also, in that the relation between the two is suddenly reversed again, for after the centripetal force has been increasing for a length of time and the centrifugal force has decreased accordingly, a point is reached at which the centripetal force decreases and the centrifugal increases. But what contradicts this way of imagining things is the reciprocal relation of the essentially qualitative determinateness of the two forces which will simply not allow their being taken apart. For each force has meaning only with respect to the other; and to the extent, therefore, that the one had an excess over the other, to that extent it would have no connection with this other and would not be. – If it is assumed that one of them is at one time greater than the other and stood in relation to the smaller precisely as greater, then what was said above applies,[37] namely that the greater would gain absolute predominance and the smaller would vanish; it is as something vanishing, lacking support, that the latter is being posited, and nothing is altered in this determination by supposing that the vanishing happens only gradually, or that it decreases only *as much as* the other increases, for the one force that increases is destroyed together with the other that decreases, since it is what it is only to the extent that the other is what it is. It takes but little consideration to see that if, for example, a body's centripetal force **21.379** increases as it approaches perihelion, as it is claimed, while the centrifugal force decreases in the same proportion, the latter force *would no longer be able* to pull the body away from the former and steer it again at a distance from the central body. On the contrary, since the one force has gained the upper hand, the other is overpowered, and the body will be driven with accelerated velocity to its central body. And conversely, if the centrifugal force gains the upper hand when infinitely near to aphelion, it is contradictory that now, right in aphelion, it would be overpowered by the weaker force. – Further, it is evident that it is an *alien force* which would produce this *turnabout*, and this means that the sometimes accelerating, sometimes decelerating, velocity of the movement can*not be ascertained* or, as it is said, *explained* from the assumed determination of the very factors which were assumed precisely for the sake of explaining this difference. The logical consequence of the vanishing of the force in either direction and thus of elliptical movement in general is ignored and obscured because of the undeniable fact that this motion does endure, shifting from accelerating to decelerating velocity. The assumption of the sudden conversion in aphelion

[37] Cf. above, 21.377.

of the weakness of the centripetal force into the predominating strength of the centrifugal force, and of the converse in perihelion, implies for one thing our earlier result, namely that each of the two sides of the inverse relation is in it the whole inverse relation. For the side of the motion from aphelion to perihelion, that is, the side where the centripetal force is taken to predominate, is still supposed to contain the centrifugal force, though in decreasing proportion as the other increases; and, on the side of the retarded motion, the predominant and ever more predominating centrifugal force is supposed to be present in an exact inverse relation to the centripetal; so that on neither side does one of the two forces ever vanish but only becomes smaller up to the moment of its sudden conversion into the predominant force. All that thus transpires on each side is the defect typical of an inverse relation, in this case namely, that either each force is taken to be self-subsistent for itself (but then the two forces merely join in a movement externally, as in the parallelogram of forces, and the unity of the concept, the nature of the thing itself, is consequently done away with), or, since each relates to the other qualitatively by virtue of the concept, neither can attain in face of the other the indifferent independent subsistence which a *more* supposedly imparts to it. The form of intensity, the so-called
21.380 dynamic factor, changes nothing, because it too has its determinateness in quantum and hence can express force (that is, has concrete existence) only to the extent that it is confronted by an opposing force. But this same sudden conversion of a predominating force into its opposite also implies the alternation of the qualitative determination of positive and negative, the increase of the one being just as much the loss of the other. But the theory breaks up the indivisible qualitative bond of this qualitative opposition into a *temporal succession* and consequently begs the *explanation* of the qualitative alternation and, most of all, of the breaking up itself. There is no trace left here of the semblance of unity which is still to be found in the increase of the one side accompanied by the corresponding decrease of the other; all that we have is a merely *external* succession which contradicts what the bond between the two entails, namely that as one predominates, the other must disappear.

The same relation has been applied to the forces of attraction and repulsion for the purpose of understanding the different *densities* of bodies; also the inverse relation of sensibility and irritability has been enlisted in order to understand, from the inequality of these factors of *life*, the different determinations of the whole, health, as well as the differentiation of living things into species. This kind of explaining was supposed to become in the philosophy of nature the basis for physiology, nosology, and then zoology. But the confusion, the verbal nonsense into which it became entangled

because of the uncritical use of these conceptual determinations, quickly led to the abandonment in these areas of philosophy of this formalism – though it is widely practiced in science, especially physical astronomy.

Since *absolute indifference* may seem to be the fundamental determination of Spinoza's *substance*, we may further remark that this is indeed the case to the extent that in both all the determinations of being, like in general every further concrete differentiation of thought and extension, etc., are posited as vanished. It is simply a matter of indifference what anything might have looked like in existence before being swallowed up in this abyss of abstraction if one stops short at it. But substance, as indifference, is obligated on one side by *the need of determining it* and of *taking this need* **21.381** *into consideration*: substance ought not to remain Spinoza's substance, the sole determination of which is the negative one that everything is absorbed into it. Differentiation occurs with Spinoza quite empirically – attributes (thought and extension) and then modes, affects, and all the remaining. The differentiation falls to the intellect, itself a mode; the connection of the attributes to substance and to each other *says no more* than that they express the whole of substance, that their content, the order of things as extended and as thoughts, is this same substance. But by the determination of substance as indifference, *difference* itself now becomes a topic of reflection and is now *explicitly posited* as it *de facto* is in Spinoza, namely as an *external* and therefore, more precisely, a *quantitative* difference. The indifference does remain, just like substance, immanent in the differentiation, but abstractly, only *in itself*; the difference is *not* immanent in the indifference but, being quantitative, is rather the opposite of immanence, and the quantitative indifference is rather the self-externality of the unity. Thus the difference is also not conceptually grasped qualitatively, and the substance is not determined as self-differentiating, as subject. The immediate consequence so far as the category of indifference itself is concerned is that in it the differentiation of qualitative and quantitative determination falls apart, just as was our result when developing the category itself.[38] Whereas in *measure* both moments were immediately posited as one, indifference is the *dissolution* of measure.

c. transition into essence

Absolute indifference is the final determination of *being* before the latter becomes *essence*; but it does not attain *essence*. It shows that it still belongs to the sphere of *being* because it is still determined as *indifferent*, and therefore

[38] Cf. above, 21.377.

difference is *external* to it, quantitative. This externality is its *existence*, by which it finds itself at the same time in the opposition of being determined over against it as *existing in itself*,[39] not as being thought as the absolute that *exists for itself*. Or again, it is *external reflection* which insists that specific
21.382 determinations, whether *in themselves* or in the absolute, are *one and the same* – that their difference is only an indifferent one, not a difference in itself. What is still missing here is that this reflection should sublate itself, that it would cease to be the *external* reflection of *thought*, of a subjective consciousness, but that it would be rather the very determination of the difference of that unity – a unity which would then prove itself to be the absolute negativity, the unity's *indifference towards itself*, towards its own indifference no less than towards otherness.

But this self-sublation of the determination of indifference has already manifested itself; in the progressive positing of its being it has shown itself on all sides to be contradiction. Indifference is *in itself* the totality in which all the determinations of being are sublated and contained; thus it is the substrate, but at first only in the *one-sided determination of being-in-itself*, and consequently the differences, the quantitative difference and the inverse ratio of factors, are present in it as *external*. As thus the contradiction of itself and its determinateness, of its implicitly existent determination and of its posited determinateness, it is the negative totality whose determinacies have internally sublated themselves – consequently, have also sublated the one-sidedness of their substrate, their in-itselfness. Indifference, now posited as what it in fact is, is simple and infinitely negative self-reference, the incompatibility of itself with itself, the repelling of itself from itself. Determining and being determined are not a transition, nor an external alteration, nor again an *emergence* of determinations in it, but its own referring to itself which is the negativity of itself, of its in-itselfness.

But as so repelled, the determinations are not self-possessed – do not emerge as self-subsistent or external but are rather *as* moments: *first*, as belonging to the unity whose *existence is still only implicit*, they are not let go by it but are rather borne by it as their substrate and are filled by it alone; and, *second*, as determinations immanent to the unity *as it exists for itself*, they are only through their repulsion from themselves. Instead of *some existent or other*, as they are in the whole sphere of being, they now are simply and solely *as posited*, with the sole determination and significance of being *referred* to their unity and hence each to the other and to negation – marked by this their relativity.

[39] *an sichseiende*.

Being in general and the being or immediacy of the different determinacies have thereby vanished just as much as the *in-itselfness*, and the unity is being, *immediately presupposed* totality, so that it is only this *simple self-reference*, *mediated* by *the sublation of this presupposition*, and this presupposedness, the immediate being, is itself only a moment of its repelling: the original self-subsistence and self-identity are only as the *resulting infinite self-rejoining*. And so is being determined as *essence* – being which, through the sublation of being, is simple *being with itself*. **21.383**

BOOK TWO

The Doctrine of Essence

ESSENCE

The *truth* of *being* is *essence*.

Being is the immediate. Since the goal of knowledge is the truth, what being is *in and for itself*, knowledge does not stop at the immediate and its determinations, but penetrates beyond it on the presupposition that *behind* this being there still is something other than being itself, and that this background constitutes the truth of being. This cognition is a mediated knowledge, for it is not to be found with and in essence immediately, but starts off from an other, from being, and has a prior way to make, the way that leads over and beyond being or that rather penetrates into it. Only inasmuch as knowledge *recollects* itself *into itself* out of immediate being, does it find essence through this mediation. – The German language has kept "essence" (*Wesen*) in the past participle (*gewesen*) of the verb "to be" (*sein*), for essence is past – but timelessly past – being.

When this movement is represented as a pathway of knowledge, this beginning with being and the subsequent advance which sublates being and arrives at essence as a mediated term appears to be an activity of cognition external to being and indifferent to its nature.

But this course is the movement of being itself. That it is being's nature to recollect itself, and that it becomes essence by virtue of this interiorizing, this has been displayed in being itself.

If, therefore, the absolute was at first determined as *being*, now it is determined as *essence*. Cognition cannot in general stop at the manifold of *existence*; but neither can it stop at *being*, pure *being*; immediately one is forced to the reflection that this *pure being*, this *negation* of everything finite, presupposes a *recollection* and a movement which has distilled immediate existence into pure being. Being thus comes to be determined as essence, as a being in which everything determined and finite is negated. So it is simple

unity, *void of determination*, from which the determinate has been removed *in an external manner*; to this unity the determinate was itself something
11.242 external and, after this removal, it still remains opposite to it; for it has not been sublated in itself but relatively, only with reference to this unity. – We already noted above[1] that if pure essence is defined as the *sum total of all realities*, these realities are equally subject to the nature of determinateness and abstractive reflection and their sum total is reduced to empty simplicity. Thus defined, essence is only a product, an artifact. *External* reflection, which is abstraction, only lifts the determinacies of being *out of* what is left over as essence and only deposits them, as it were, somewhere else, letting them exist as before. In this way, however, essence is neither *in itself* nor *for itself*; it is *by virtue of another*, through external abstractive reflection; and it is *for another*, namely for abstraction and in general for the existent which still remains opposite to it. In its determination, therefore, it is a dead and empty absence of determinateness.

As it has come to be here, however, essence is what it is, not through a negativity foreign to it, but through one which is its own – the infinite movement of being. It is *being-in-and-for-itself* – absolute *in-itselfness*; since it is indifferent to every determinateness of being, otherness and reference to other have been sublated. But neither is it only this in-itselfness; as merely being-in-itself, it would be only the abstraction of pure essence; but it is *being-for-itself* just as essentially; it is itself this negativity, the self-sublation of otherness and of determinateness.

Essence, as the complete turning back of being into itself, is thus at first the indeterminate essence; the determinacies of being are sublated in it; it holds them *in itself* but without their being posited *in it*. Absolute essence in this simple unity with itself has *no existence*. But it must pass over into existence, for it is *being-in-and-for-itself*; that is to say, it *differentiates* the determinations which it holds *in itself*, and, since it is the repelling of itself from itself or indifference towards itself, *negative* self-reference, it thereby posits itself over against itself and is infinite being-for-itself only in so far as in thus differentiating itself from itself it is in unity with itself. – This determining is thus of another nature than the determining in the sphere of being, and the determinations of essence have another character than the determinations of being. Essence is absolute unity of being-in-itself and being-for-itself; consequently, its determining remains inside this unity; it is neither a becoming nor a passing over, just as the determinations themselves are neither an *other* as other nor references *to some other*; they

[1] Cf. GW 11, 76; also above, 21.99–100.

are self-subsisting but, as such, at the same time conjoined in the unity of essence. – Since essence is at first *simple* negativity, in order to give itself existence and then being-for-itself, it must now posit in *its* sphere the determinateness which it contains in principle only *in itself*. **II.243**

Essence is in *the whole* what *quality* was in the sphere of being: absolute indifference with respect to limit. Quantity is instead this indifference in *immediate* determination, limit being in it an immediate external determinateness; quantity *passes over* into quantum; the external limit is necessary to it and *exists* in it. In essence, by contrast, the determinateness does not *exist*; it is *posited* only by the essence itself, not free but only with *reference* to the unity of the essence. – The negativity of essence is *reflection*, and the determinations are *reflected* – posited by the essence itself in which they remain as sublated.

Essence stands between *being* and *concept*; it makes up their middle, its movement constituting the *transition* of being into the concept. Essence is *being-in-and-for-itself*, but it is this in the determination of being-in-itself; for its general determination is that it emerges from being or that it is *the first negation of being*. Its movement consists in positing negation or determination in being, thereby giving itself *existence* and becoming as infinite being-for-itself what it is in itself. It thus gives itself its *existence* which is *equal* to its being-in-itself and becomes *concept*. For the concept is the absolute as it is absolutely, or in and for itself, in its existence. But the existence which essence gives to itself is not yet existence as it is in and for itself but as essence *gives* it to itself or as *posited*, and hence still distinct from the existence of the concept.

First, essence *shines within itself* or is *reflection*; second, it *appears*; third, it *reveals* itself. In the course of its movement, it posits itself in the following determinations:

I. As *simple* essence existing in itself, remaining in itself in its determinations;
II. As emerging into existence, or according to its concrete existence and *appearance*;
III. As essence which is one with its appearance, *as actuality*.

SECTION I

II.244

Essence as Reflection Within

Essence issues from being; hence it is not immediately in and for itself but is a *result* of that movement. Or, since essence is taken at first as something immediate, it is a determinate existence to which another stands opposed; it is only *essential* existence, as against the *unessential*. But essence is being which has been sublated in and for itself; what stands over against it is only shine. The shine, however, is essence's own positing.

First, essence is *reflection*. Reflection determines itself; its determinations are a positedness which is immanent reflection at the same time. *Second*, these *reflective determinations* or *essentialities* are to be considered. *Third*, as the reflection of its immanent determining, essence turns into *foundation* and passes over into *concrete existence* and *appearance*.

CHAPTER I

Shine

As it issues from being, essence seems to stand over against it; this immediate being is, *first*, the *unessential*.

But, *second*, it is more than just the unessential; it is being void of essence; it is *shine*.

Third, this shine is not something external, something other than essence, but is essence's own shining. This shining of essence within it is *reflection*. **II.245**

A. THE ESSENTIAL AND THE UNESSENTIAL

Essence is *sublated being*. It is simple equality with itself but is such as the *negation* of the sphere of being in general. And so it has immediacy over against it, as something from which it has come to be but which has preserved and maintained itself in this sublating. Essence itself is in this determination an *existent* immediate essence, and *with reference* to it being is only something negative, nothing in and for itself: essence, therefore, is a *determined* negation. Being and essence relate to each other in this fashion as again *others* in general which are mutually indifferent, for *each has a being, an immediacy*, and according to this being they stand in equal value.

But as contrasted with essence, being is at the same time the *unessential*; as against essence, it has the determination of something sublated. And in so far as it thus relates to essence as an other only in general, essence itself is not essence proper but is just another existence, the *essential*.

The distinction of essential and unessential has made essence relapse into the sphere of *existence*, for as essence is at first, it is determined with respect to being as an existent and therefore as *an other*. The sphere of existence is thus laid out as foundation, and that in this sphere being is being-in-and-for-itself is a further determination external to existence, just as, contrariwise, essence is indeed being-in-and-for-itself, but only over against an other, in a *determinate* respect. – Consequently, inasmuch as

essential and *unessential* aspects are distinguished in an existence from each other, this distinguishing is an external positing, a taking apart that leaves the existence itself untouched; it is a separation which falls on the side of a *third* and leaves undetermined what belongs to the essential and what belongs to the unessential. It is dependent on some external standpoint or consideration and the same content can therefore sometimes be considered as essential, sometimes as unessential.

On closer consideration, essence becomes something only essential as contrasted with an unessential because essence is only taken, is as sublated being or existence. In this fashion, essence is only the *first* negation, or the negation, which is *determinateness*, through which being becomes only existence, or existence only an *other*. But essence is the absolute negativity of being; it is being itself, but not being determined only as an *other*: it is being rather that has sublated itself both as immediate being and as
11.246 immediate negation, as the negation which is affected by an otherness. Being or existence, therefore, does not persist except as what essence is, and the immediate which still differs from essence is not just an unessential existence but an immediate which is null *in and for itself*; it only is a *non-essence*, *shine*.

B. SHINE

1. *Being is shine*. The being of shine consists solely in the sublatedness of being, in being's nothingness; this nothingness it has in essence, and apart from its nothingness, apart from essence, it does not exist. It is the negative posited as negative.

Shine is all that remains of the sphere of being. But it still seems to have an immediate side which is independent of essence and to be, in general, an *other* of essence. *Other* entails in general the two moments of existence and non-existence. Since the unessential no longer has a being, what is left to it of otherness is only the *pure moment of non-existence*; shine is this *immediate* non-existence, a non-existence in the determinateness of being, so that it has existence only with reference to another, in its non-existence; it is the non-self-subsistent which exists only in its negation. What is left over to it is thus only the pure determinateness of *immediacy*; it is as *reflected* immediacy, that is, one which is only *by virtue of the mediation* of its negation and which, over against this *mediation*, is nothing except the empty determination of the immediacy of non-existence.

– *Shine*, the "phenomenon" of *skepticism*, and also the "appearance" of idealism, is thus this *immediacy* which is not a something nor a

thing – in general, not an indifferent being that would exist apart from its determinateness and connection with the subject. Skepticism did not permit itself to say "It *is*," and the more recent idealism did not permit itself to regard cognitions as a knowledge of the thing-in-itself. The shine of the former was supposed absolutely not to have the foundation of a being: the thing-in-itself was not supposed to enter into these cognitions. But at the same time skepticism allowed a manifold of determinations for its shine, or rather the latter turned out to have the full richness of the world for its content. Likewise for the appearance of idealism: it encompassed the full range of these manifold determinacies. So, the shine of skepticism and the appearance of idealism do i*mmediately* have a manifold of determination. **11.247** This content, therefore, might well have no being as foundation, no thing or thing-in-itself; for itself, it remains as it is; it is simply transposed from being into shine, so that the latter has within itself those manifold determinacies that exist immediately, each an other to the other. The shine is thus itself something *immediately* determined. It can have this or that content; but whatever content it has, it has not posited it but possesses it immediately. Idealism, whether Leibnizian, Kantian, Fichtean, or in any other form, has not gone further than skepticism in this: it has not advanced beyond being as determinateness. Skepticism lets the content of its shine to be *given* to it; the shine exists for it *immediately*, whatever content it might have. The Leibnizian *monad* develops its representations from itself but is not their generating and controlling force; they rise up in it as a froth, indifferent, immediately present to each other and to the monad as well. Likewise Kant's appearance is a *given* content of perception that presupposes affections, determinations of the subject which are immediate to each other and to the subject. As for the infinite obstacle of Fichte's Idealism, it might well be that it has no thing-in-itself for foundation, so that it becomes a determinateness purely within the "I." But this determinateness that the "I" makes its own, sublating its externality, is to the "I" at the same time an *immediate* determinateness, a *limitation* of the "I" which the latter may transcend but which contains a side of indifference, and on account of this indifference, although internal to the "I," it entails an *immediate* non-being of it. –

2. Shine thus contains an immediate presupposition, an independent side *vis-à-vis* essence. But the task, inasmuch as this shine is distinct from essence, is not to demonstrate that it sublates itself and returns into essence, for being has returned into essence in its totality; shine is the null as such. The task is to demonstrate that the determinations which distinguish it from essence are the determinations of essence itself; further,

that this *determinateness of essence*, which shine is, is sublated in essence itself.

What constitutes the shine is the immediacy of *non-being*; this non-being, however, is nothing else than the negativity of essence within essence itself. In essence, being is non-being. Its inherent *nothingness* is the *negative nature of essence itself*. But the immediacy or indifference which this non-being contains is essences's own absolute in-itself. The negativity of essence is its self-equality or its simple immediacy and indifference. Being has preserved itself in essence inasmuch as this latter, in its infinite negativity, has this equality with itself; it is through this that essence is itself being.

11.248 The immediacy that the determinateness has in shine against essence is thus none other than essence's own immediacy, though not the immediacy of an existent but rather the absolutely mediated or reflective immediacy which is shine – being, not as being, but only as the determinateness of being as against mediation; being as moment.

These two moments – nothingness but as subsisting, and being but as moment; or again, negativity existing in itself and reflected immediacy – these two moments that are *the moments of shine*, are thus *the moments of essence itself*; it is not that there is a shine of being *in* essence, or a shine of essence *in* being: the shine in the essence is not the shine of an other but is rather *shine as such*, *the shine of essence itself*.

Shine is essence itself in the determinateness of being. Essence has a shine because it is *determined* within itself and is therefore distinguished from its absolute unity. But this determinateness is as determinateness just as absolutely sublated in it. For essence is what stands on its own: it *exists*[2] as self-mediating through a negation which it itself is. It is, therefore, the identical unit of absolute negativity and immediacy. – The negativity is negativity in itself; it is its reference to itself and thus immediacy in itself. But it is negative reference to itself, a self-repelling negating; thus the immediacy existing in itself is the negative or the *determinate* over against the negativity. But this determinateness is itself absolute negativity and this determining, which as determining immediately sublates itself, is a turning back into itself.

Shine is the negative which has a being, but in another, in its negation; it is a non-self-subsisting-being which is sublated within and null. And so it is the negative which returns into itself, the non-subsistent as such, internally non-subsistent. This reference of the negative or the non-subsistent *to itself* is the *immediacy* of this non-subsistent; it is an *other* than it; it is its

[2] *ist* (stressed in Hegel).

determinateness over against it, or the negation over against the negative. But this negation which stands over against the negative is negativity as referring solely to itself, the absolute sublation of the determinateness itself.

The *determinateness* that shine is in essence is, therefore, infinite determinateness; it is only the negative which coincides with *itself* and hence a determinateness that, as determinateness, is self-subsistence and not determined. – Contrariwise, the self-subsistence, as self-referring *immediacy*, equally is just determinateness and moment, negativity solely referring to itself. – This negativity which is identical with immediacy, and thus the immediacy which is identical with negativity, is *essence*. Shine is, therefore, **II.249**
essence itself, but essence in a determinateness, in such a way, however, that the determinateness is only a moment, and the *essence* is the shining of itself within itself.

In the sphere of being, non-being *arises* over against being, each equally an *immediate*, and the truth of both is becoming. In the sphere of essence, we have the contrast first of essence and the non-essential, then of essence and shine, the non-essential and the shine being both the leftover of being. But these two, and no less the distinction of essence from them, consist solely in this: that essence is taken at first as an *immediate*, not as it is in itself, namely as an immediacy which is immediacy as pure mediacy or absolute negativity. This first immediacy is thus only the *determinateness* of immediacy. The sublating of this determinateness of essence consists, therefore, in nothing further than showing that the unessential is only shine, and that essence rather contains this shine within itself. For essence is an infinite self-contained movement which determines its immediacy as negativity and its negativity as immediacy, and is thus the shining of itself within itself. In this, in its self-movement, essence is *reflection*.

C. REFLECTION

Shine is the same as what *reflection* is; but it is reflection as *immediate*. For this shine which is internalized and therefore alienated from its immediacy, the German has a word from an alien language, "*Reflexion*."

Essence is *reflection*, the movement of becoming and transition that remains within itself, wherein that which is distinguished is determined simply and solely as the negative in itself, as shine. – In the becoming of being, it is being which lies at the foundation of determinateness, and determinateness is reference to *an other*. Reflective movement is by contrast the other as *negation in itself*, a negation which has being only as self-referring. Or, since this self-referring is precisely this negating of

negation, what we have is *negation as negation*, negation that has its being in its being-negated, as shine. Here, therefore, the other is not *being with negation* or limit, but *negation with negation*. But the *first* over against this other, the immediate or being, is only this self-equality itself of negation, the negated negation, the absolute negativity. This self-equality or *immediacy*,
11.250 therefore, is not a *first* from which the beginning is made and which would pass over into its negation; nor is there an existent substrate which would go through the moves of reflection; immediacy is rather just this movement itself.

In essence, therefore, the becoming, the reflective movement of essence, is the *movement from nothing to nothing and thereby back to itself*. Transition or becoming sublates itself in its transition; the other which comes to be in this transition is not the non-being of a being but the nothingness of a nothingness, and this, to be the negation of a nothingness, constitutes being. – Being is only as the movement of nothingness to nothingness, and so it is essence; and this essence does not *have* this movement *in itself*, but the movement is rather the absolute shine itself, the pure negativity which has nothing outside it which it would negate but which rather negates only its negative, the negative which is only in this negating.

This pure absolute reflection, which is the movement from nothing to nothing, further determines itself.

It is, *first*, *positing reflection*.

Second, it takes as its starting point the *presupposed immediate*, and then it is *external* reflection.

Third, it sublates however this presupposition, and because in the sublating of the presupposition it presupposes *at the same time*, it is *determining* reflection.

1. Positing reflection

Shine is a nothingness or a lack of essence. But a nothingness or that which is void of essence does not have its being in an *other* in which it shines, but its being is its own equality with itself; this conversion of the negative with itself has been determined as the absolute reflection of essence.

This self-referring negativity is therefore the negating of itself. It is thus just as much *sublated* negativity as it is negativity. Or again, it is itself the negative and the simple equality with itself or immediacy. It consists, therefore, in being *itself* and *not being itself*, and the two in *one* unity. –

Reflection is at first the movement of the nothing to the nothing, and thus negation coinciding with itself. This self-coinciding is in general

simple equality with itself, immediacy. But this falling together is not the transition of negation into equality as into a *being other than it*; reflection is transition rather as the sublating of transition, for it is the immediate falling together of the negative *with itself*. And so this coinciding is, *first*, self-equality or immediacy; but, *second*, this immediacy is the self-equality **11.251** *of the negative*, and hence self-negating equality, immediacy which is in itself the negative, the negative of itself: its being is to be what it is not.

The self-reference of the negative is therefore its turning back into itself; it is immediacy as the sublating of the negative, but immediacy simply and solely as this reference or as *turning back from a one*, and hence as self-sublating immediacy. – This is *positedness*, immediacy purely as *determinateness* or as self-reflecting. This immediacy, which is only as the *turning back* of the negative into itself, is the immediacy which constitutes the determinateness of shine, and from which the previous reflective movement seemed to begin. But, far from being able to begin with this immediacy, the latter first is rather as the turning back or as the reflection itself. Reflection is therefore the movement which, since it is the turning back, only in this turning is that which starts out or returns.

It is a *positing*, inasmuch as it is immediacy as a turning back; that is to say, there is not an other beforehand, one either from which or to which it would turn back; it is, therefore, only as a turning back or as the negative of itself. But further, this immediacy is sublated negation and sublated return into itself. Reflection, as the sublating of the negative, is the sublating *of its other*, of the immediacy. Because it is thus immediacy as a turning back, the coinciding of the negative with itself, it is equally the negation of the negative as negative. And so it is *presupposing*. – Or immediacy is as a turning back only the negative of itself, just this, not to be immediacy; but reflection is the sublating of the negative of itself, coincidence with itself; it therefore sublates its positing, and inasmuch as it is in its positing the sublating of positing, it is presupposing. – In presupposing, reflection determines the turning back into itself as the negative of itself, as that of which essence is the sublating. It is its relating to itself, but to itself as to the negative of itself; only so is it negativity which abides with itself, self-referring negativity. Immediacy comes on the scene simply and solely as a turning back and is that negative which is the semblance of a beginning, the beginning which the return negates. The turning back of essence is therefore its self-repulsion. Or inner directed reflection is essentially the presupposing of that from which the reflection is the turning back.

It is only by virtue of the sublating of its equality with itself that essence is equality with itself. Essence presupposes itself, and the sublating of this

11.252 presupposing is essence itself; contrariwise, this sublating of its presupposition is the presupposition itself. – Reflection thus *finds* an immediate *before it* which it transcends and from which it is the turning back. But this turning back is only the presupposing of what was antecedently found. This antecedent *comes to be* only by being *left behind*; its immediacy is sublated immediacy. – The sublated immediacy is, contrariwise, the turning back into itself, essence that *arrives* at itself, simple being equal to itself. This arriving at itself is thus the sublating of itself and self-repelling, presupposing reflection, and its repelling of itself from itself is the arriving at itself.

It follows from these considerations that the movement of reflection is to be taken as an *absolute* internal *counter-repelling*. For the presupposition of the turning back into itself – that from which essence *arises*, essence *being* only as this coming back – is only in the turning back itself. Transcending the immediate from which reflection begins occurs rather only through this transcending; and the transcending of the immediate is the arriving at the immediate. The movement, as forward movement, turns immediately around into itself and so is only self-movement – a movement which comes from itself in so far as *positing* reflection is *presupposing* reflection, yet, as *presupposing* reflection, is simply *positing* reflection.

Thus is reflection itself and its non-being, and only is itself by being the negative of itself, for only in this way is the sublating of the negative at the same time a coinciding with itself.

The immediacy which reflection, as a process of sublating, presupposes for itself is simply and solely a *positedness*, something *in itself* sublated which is not diverse from reflection's turning back into itself but is itself only this turning back. But it is at the same time determined as a *negative*, as immediately in opposition to something, and hence to an other. And so is reflection *determined*. According to this determinateness, because reflection *has* a presupposition and takes its start from the immediate as its other, it is *external reflection*.

2. External reflection

Reflection, as absolute reflection, is essence shining within, essence that posits only shine, only positedness, for its presupposition; and as presupposing reflection, it is immediately only positing reflection. But external or real reflection presupposes itself as sublated, as the negative of itself. In this determination, it is doubled. At one time it is as what is presupposed,
11.253 or the reflection into itself which is the immediate. At another time, it is as

the reflection negatively referring to itself; it refers itself to itself as to that its non-being.

External reflection thus *presupposes* a being, *at first* not in the sense that its immediacy is only positedness or moment, but in the sense rather that this immediacy refers to itself and the determinateness is only as moment. Reflection refers to its presupposition in such a way that the latter is its negative, but this negative is thereby sublated *as* negative. – Reflection, in positing, immediately sublates its positing, and so it has an *immediate presupposition*. It therefore *finds* this presupposition before it as something from which it starts, and from which it only makes its way back into itself, negating it as its negative. But that this presupposition is a negative or a positedness is not its concern; this determinateness belongs only to positing reflection, whereas in the presupposing positedness it is only as sublated. What external reflection determines and posits in the immediate are determinations which to that extent are external to it. – In the sphere of being, external reflection was the infinite; the finite stands as the first, as the real from which the beginning is made as from a foundation that abides, whereas the infinite is the reflection into itself standing over against it.

This external reflection is the syllogism in which the two extremes are the immediate and the reflection into itself; the middle term is the reference connecting the two, the determinate immediate, so that one part of this connecting reference, the immediate, falls to one extreme alone, and the other, the determinateness or the negation, only to the other extreme.

But if one takes a closer look at what the external reflection does, it turns out that it is, *secondly*, the positing of the immediate, an immediate which thus becomes the negative or the determined; but it is immediately also the sublating of this positing, for it *pre*-supposes the immediate; in negating, it is the negating of its negating. But thereby it immediately is equally a *positing*, the sublating of the immediate which is its negative; and this negative, from which it seemed to begin as from something alien, only is in this its beginning. In this way, the immediate is not only *implicitly in itself* (that is, for us or in external reflection) *the same as* what reflection is, but is *posited* as being the same. For the immediate is determined by reflection as the negative of the latter or as the other of it, but it is reflection itself which negates this determining. – The externality of reflection *vis-à-vis* the immediate is consequently sublated; its self-negating positing is its coinciding with its negative, with the immediate, and this coinciding is **11.254** the immediacy of essence itself. – It thus transpires that external reflection is not external but is just as much the immanent reflection of immediacy

itself; or that the result of positing reflection is essence existing in and for itself. External reflection is thus *determining reflection*.

Remark

Reflection is usually taken in a subjective sense as the movement of judgment which transcends an immediately given representation and seeks more universal determinations for it or compares it with such determinations. Kant opposes *reflective* and *determining judgment* (*Critique of Judgment*, Introduction, pp. xxiiiff.). He defines judgment in general as the faculty of *thinking the particular as contained under the universal. If the universal* (the rule, the principle, the law) *is given*, then the judgment which subsumes the particular under it is *determining*. But if what is given is only a particular, for which it is up to the *judgment to find the universal*, then the judgment is *reflecting*. Here, too, reflection is therefore a matter of rising above the immediate to the universal. On the one hand, the immediate is determined as particular only by being thus referred to its universal; for itself, it is only a singular or an immediate existent. But, on the other hand, that to which it is referred, its universal, its rule, principle, law, is in general that which is reflected into itself, which refers itself to itself, is the essence or the essential.

But at issue here is neither the reflection of consciousness, nor the more specific reflection of the understanding that has the particular and the universal for its determinations, but reflection in general. It is clear that the reflection to which Kant assigns the search of the universal for a given particular is likewise only an *external* reflection which applies itself to the immediate as to something given. – But the concept of absolute reflection, too, is implicit in it. For the universal, the principle or the rule and law, to which reflection rises in its process of determination is taken to be the essence of the immediate from which the reflection began; the immediate, therefore, to be a nothingness which is posited in its true being only by the turning back of the reflection from it, by the determining of reflection. Therefore, what reflection does to the immediate, and the determinations that derive from it, is not anything external to it but is rather its true being.

External reflection was also meant whenever reflection, as it was for a
11.255 while the fashion in recent philosophy, was being accused of all evil, and it and its ways of determining were regarded as the polar opposite, nay the ancestral enemy, of true philosophical method. In fact, also thought-reflection, in so far as it operates externally, proceeds from something immediately given that is alien to it, and considers itself to be a merely formal operation that receives its material content from outside and of

itself only is a movement conditioned by that content. – Further, as the examination of determining reflection will now bear out, *reflective determinations* are of a different kind than the merely immediate determinations of being. These last are more readily admitted to be transient, merely relative, confined to the reference to another. The reflective determinations have instead the form of a being which is in-and-for-itself. They claim the status, therefore, of *essential determinations*, and instead of passing over into their opposites, they appear rather as absolute, free, and mutually indifferent. They stubbornly resist, therefore, their movement; their *being* is the self-identity which they possess in their determinateness, and by virtue of it, though indeed presupposing each other, in this referring to the other they nonetheless maintain themselves as totally separate.

3. Determining reflection

Determining reflection is in general the unity of *positing* and *external* reflection. This is now to be examined more closely.

1. External reflection begins from immediate being, *positing* reflection from nothing. In its determining, external reflection posits another in the place of the sublated being, but this other is essence; the positing does not posit its determination in the place of an other; it has no presupposition. But, precisely for this reason, it is not complete as determining reflection; the determination which it posits is consequently *only* a posited; this is an immediate, not however as equal to itself but as self-negating; its connection with the turning back into itself is absolute; it *is* only in the reflection-into-itself but is not this reflection itself.

The *posited* is therefore an *other*, but in such a manner that the self-equality of reflection is retained; for the posited is only as sublated, as reference to the turning back into itself. – In *the sphere of being*, *existence* was the being that had negation in it, and being was the immediate ground and element of this negation which was, therefore, itself immediate negation. In the *sphere of essence*, *positedness* is what corresponds to existence. Positedness is equally an existence, but its ground is being as essence or as pure negativity; it is a determinateness or a negation, not as existent but immediately as sublated. *Existence is only positedness*; this is the principle **11.256**
of the essence of existence. Positedness stands on the one side over against existence, and over against essence on the other: it is to be regarded as the means which conjoins existence with essence and essence with existence. – If it is said, a determination is *only* a positedness, the claim can thus have a twofold meaning, according to whether the determination is such in

opposition to existence or in opposition to essence. In either meaning, existence is taken for something superior to positedness, which is attributed to external reflection, to the subjective. In fact, however, positedness is the superior, because, as posited, existence is what it is in itself – something negative, something that refers simply and solely to the turning back into itself. For this reason positedness is *only* a positedness with respect to essence: it is the negation of this turning back as achieved return into itself.

2. Positedness is not yet a determination of reflection; it is only determinateness as negation in general. But the positing is now united with external reflection; in this unity, the latter is absolute presupposing, that is, the repelling of reflection from itself or the positing of determinateness *as its own*. As posited, therefore, positedness is negation; but as presupposed, it is reflected into itself. And in this way positedness is a *determination of reflection*.

The determination of reflection is distinct from the determinateness of being, of quality; the latter is immediate reference to other in general; positedness also is reference to other, but to immanently reflected being. Negation as quality is *existent* negation; being constitutes its ground and element. The determination of reflection, on the contrary, has for this ground immanent reflectedness. Positedness gets fixed in determination precisely because reflection is self-equality in its negatedness; the latter is therefore itself reflection into itself. Determination persists here, not by virtue of being but because of its self-equality. Since the being which sustains quality is unequal to the negation, quality is consequently unequal within itself, and hence a transient moment which disappears in the other. The determination of reflection is on the contrary positedness *as negation* – negation which has negatedness for its ground, is therefore not unequal to itself within itself, and hence *essential* rather than transient determinateness. What gives subsistence to it is the *self-equality of reflection* which has the negative only as negative, as something sublated or posited.

Because of this reflection into themselves, the determinations of reflection appear as free *essentialities*, sublated in the void without reciprocal attraction or repulsion. In them the determinateness has become entranced and infinitely fixed by virtue of the reference to itself. It is the determinate which has subjugated its transitoriness and its mere positedness to itself,
11.257 that is to say, has deflected its reflection-into-other into reflection-into-itself. These determinations hereby constitute the determinate shine as it is in essence, the essential shine. *Determining* reflection is for this reason reflection that has exited from itself; the equality of essence with itself is lost in the negation, and negation predominates.

Thus there are two distinct sides to the determination of reflection. *First*, reflection is positedness, negation as such; *second*, it is immanent reflection. According to the side of positedness, it is negation as negation, and this already is its unity with itself. But it is this unity at first only implicitly or *in itself*, an immediate which sublates itself within, is the other of itself. – To this extent, reflection is a determining that abides in itself. In it essence does not exit from itself; the distinctions are solely *posited*, taken back into essence. But, from the other side, they are not posited but are rather reflected into themselves; negation *as* negation is equality with itself, not in its other, not reflected into its non-being.

3. Now keeping in mind that the determination of reflection is both immanently reflected reference and positedness as well, its nature immediately becomes more transparent. For, as positedness, the determination is negation as such, a non-being as against another, namely, as *against* the absolute immanent reflection or as against essence. But as self-reference, it is reflected within itself. – This, the reflection of the determination, and that positedness are distinct; its positedness is rather the sublatedness of the determination whereas its immanent reflectedness is its subsisting. In so far as now the positedness is at the same time immanent reflection, the determinateness of the reflection is *the reference in it to its otherness*. – It is not a determinateness that exists quiescent, one which would be referred to an other in such a way that the referred term and its reference would be different, each something existing in itself, each a something that excludes its other and its reference to this other from itself. Rather, the determination of reflection is within it the *determinate side* and the *reference* of this determinate side as determinate, that is, the reference to its negation. – Quality, through its reference, passes over into another; its alteration begins in its reference. The determination of reflection, on the contrary, has taken its otherness back into itself. It is *positedness* – negation which has however deflected the reference to another into itself, and negation which, equal to itself, is the unity of itself and its other, and only through this is an *essentiality*. It is, therefore, positedness, negation, but as reflection into itself it is at the same time the sublatedness of this positedness, infinite reference to itself.

CHAPTER 2

11.258 *The essentialities or the determinations of reflection*

Reflection is determined reflection; accordingly, essence is determined essence, or it is *essentiality*.

Reflection is the *shining of essence within itself*. Essence, as infinite immanent turning back is not immediate simplicity, but negative simplicity; it is a movement across moments that are distinct, is absolute mediation with itself. But in these moments it shines; the moments are, therefore, themselves determinations reflected into themselves.

First, essence is simple self-reference, pure *identity*. This is its determination, one by which it is rather the absence of determination.

Second, the specifying determination is *difference* – difference which is either external or indefinite, *diversity* in general, or opposed diversity or *opposition*.

Third, as *contradiction* this opposition is reflected into itself and returns to its *foundation*.

Remark

The *determinations of reflection* have customarily been singled out in the *form of propositions* which were said to *apply to everything*. They were said to have the status of *universal laws of thought* that lie at the base of all thinking; to be inherently absolute and indemonstrable but immediately and indisputably recognized and accepted as true by all thought upon grasping their meaning.

Thus identity, as an essential determination, is enunciated in the proposition, "Everything is equal to itself; A = A," or, negatively, "A cannot be A and not-A at the same time."

On the face of it, it is difficult to see why only these simple determinations of reflection should be expressed in this particular form and not
11.259 also the rest, such as the categories that belong to the sphere of being. We would then have, for instance, such propositions as, "Everything *is*," "Everything has an *existence*," etc.; or again, "Everything has a *quality*, a

quantity, and so on." For being, existence, etc., are as logical determinations the predicates of *everything* in general. A category, according to the etymology of the word and Aristotle's definition of it, is what is said and asserted of every existent. – But the difference is that a determinateness of being is essentially a transition into the opposite of it; the negative of every determinateness is just as necessary as that determinateness itself; as immediate determinacies, each determinateness immediately confronts the others. If any of these categories is therefore expressed in a proposition, the opposite proposition comes up just as well, both offering themselves with equal necessity and, as immediate claims, each has at least equal right. Each would therefore require a proof as against the other, and both claims would no longer possess the character of immediately true and indisputable propositions.

The determinations of reflection are, on the contrary, not qualitative in kind. They are self-referring and consequently abstract from the determinateness of others. Further, since as determinacies they are self-*references*, they therefore already have the propositional form in them. For proposition and judgment differ mainly because in the former the *content* constitutes the connection itself of the terms, or is a *specific connection*. Judgment, on the contrary, converts the content into a predicate which is a universal determinateness by itself, distinct from its connection which is the simple *copula*. Whenever a proposition is to be transformed into a judgment, the determinate content – if, for instance, it resides in a verb – is transformed into a participle in order in this way to separate the determination itself from its connection with a subject. The propositional form is instead more closely allied to the determinations of reflection which are immanently reflected positedness. – Only, when they are enunciated as *universal laws of thought*, they are in need of a subject of their connection, and this subject is the *everything*, or an *A* which equally means "all being" and "each being."

Now this propositional form is, for one thing, something superfluous; the determinations of reflection are to be regarded in and for themselves. Moreover, the propositions suffer from the drawback that they have "being," "everything," for subject. They thus bring being into play again, and enunciate the determinations of reflection (the identity, etc., of anything) as a quality which a something would have within – not in any speculative sense, but in the sense that the something, as subject, persists in such a quality as an existent, not that it has passed over into identity (etc.) as into its truth and essence. **11.260**

Finally, although the determinations of reflection have the form of self-equality, and are therefore unconnected to an other and without opposition,

they are in fact *determinate against* one another, as it will result on closer examination – or is immediately evident in them in the case of identity, diversity, and opposition – and are not therefore exempt from transition and contradiction because of their reflective form. Therefore, on closer examination, the *several propositions* that are set up as *absolute laws of thought* are *opposed to each other*: they contradict each other and mutually sublate each other. – If everything is *identical* with itself, then it is not *different*, is not *opposed*, has no *ground*. Or if it is assumed that there are *no two things alike*, that is, that all things are *different* from each other, then A is not equal to A, nor is A in opposition, etc. The assumption of any of these propositions does not allow the assumption of any other. – The thoughtless examination of them enumerates them *one after the other*, so that they appear unconnected; it merely adverts to their reflectedness without paying attention to their other moment, to the *positedness*, or the *determinateness* as such which propels them on to transition or to their negation.

A. IDENTITY

1. Essence is simple immediacy as sublated immediacy. Its negativity is its being; it is equal to itself in its absolute negativity by virtue of which otherness and reference to other have as such simply disappeared into pure self-equality. Essence is therefore simple self-*identity*.

This self-identity is the *immediacy* of reflection. It is not that self-equality which *being* is, or also *nothing*, but a self-equality which, in producing itself as unity, does not produce itself over again, as from another, but is a pure production, from itself and in itself, *essential* identity. It is not, therefore, *abstract* identity or an identity which is the result of a relative negation preceding it, one that separates indeed what it distinguishes from it but, for the rest, leaves it *existing* outside it, the same after as before. Being, and every determinateness of being, has rather sublated itself not relatively, but in itself, and this simple negativity, the negativity of being in itself, is the identity itself.

11.261 In general, therefore, it is still the same as essence.

Remark 1

1. Thought that keeps to external reflection and knows of no other thought except that of external reflection does not attain to identity as we have just grasped it, nor does it recognize essence, which is the same. Such a thought will always have only abstract identity in mind, and, outside

and alongside it, difference. In its opinion, reason is no more than a loom intertwining warp (say, identity) and woof (say, difference), joining them externally; or, if it turns to analysis, now specifically pulling out identity, and *at the same time also* obtaining difference *alongside* it; now a comparing, and *also* a differentiating *at the same time* – a comparing in that it *abstracts* from difference, and a differentiating in that it *abstracts* from the comparing. – One must completely dismiss these assertions and these opinions concerning what reason does, since they are, as it were, of merely *historical* interest; it is rather the consideration of all things that are that reveals, *in them*, that each is self-unlike and contradictory in its equality with itself, and each self-identical in its difference, in its contradiction: that everything intrinsically is this movement of transition of one of these determinations to the other, and that everything is this transition because each determination is itself, within it, the opposite of itself. The concept of identity, a simple negativity that refers itself to itself, is not the product of external reflection but derives from being itself. Contrary to this, the identity that stays distant from difference, and the difference that stays distant from identity, are the products of external reflection and of an abstraction that arbitrarily clings to this point of indifferent difference.

2. This identity is, in the first instance, essence itself, not yet a determination of it; it is the entire reflection, not a distinct moment of it. As absolute negation, it is negation immediately negating itself – a non-being and difference that vanishes as it arises, or a distinguishing by which nothing is distinguished but which immediately collapses within itself. But the non-being of the other is the sublating of the other and hence of the distinguishing itself. Here, then, distinguishing is present as self-referring negativity, as a non-being which is the non-being of itself – a non-being which does not have its non-being in an other but has it within itself. What is present, **11.262** therefore, is self-referring, reflected difference, or pure, *absolute difference*.

Or identity is immanent reflection, reflection which is such only as inner repelling, and it is this repelling as immanent reflection, repelling that immediately recovers itself. And so identity is identity as difference which is identical with itself. But difference is identical with itself only inasmuch as it is not identity but absolute non-identity. But again, non-identity is absolute to the extent that it does not contain anything of its other but is only itself, that is, to the extent that it is identity with itself.

Internally, therefore, identity is absolute non-identity. But it is also the *determination* of identity over against non-identity. For, as immanent reflection, it posits itself as its own non-being; it is the whole, but as

reflection it posits itself as its own moment, as the positedness from which it is the turning back into itself. Thus identity is such only as a moment of itself, as *determination* of simple self-equality over against absolute difference.

Remark 2

In this remark I shall examine identity more closely as *the principle of identity* which is commonly adduced as the *first law of thought*.

In its positive formulation, A = A, this proposition is at first no more than the expression of empty *tautology*. It is rightly said, therefore, that this law of thought is *without content* and that it leads nowhere. It is thus to an empty identity that they cling, those who take it to be something true, insisting that identity is not difference but that the two are different. They do not see that in saying, "*Identity is different* from difference," they have thereby already said *that identity is something different*. And since this must also be conceded as the nature of identity, the implication is that to be different belongs to identity not externally, but within it, in its nature. – But, further, inasmuch as these same individuals hold firm to their unmoved identity, of which the opposite is difference, they do not see that they have thereby reduced it to a one-sided determinateness which, as such, has no truth. They are conceding that the principle of identity only expresses a one-sided determinateness, that it only contains *formal truth*, *truth abstract and incomplete*. – Immediately implied in this correct judgment, however,
11.263 is *that the truth is complete only in the unity of identity and difference*, and, consequently, that it only consists in this unity. When asserting that formal identity is incomplete, there is vaguely present to one's mind the totality, measured against which that identity is incomplete; but the moment one insists that identity is absolutely separate from difference and in this separation takes it to be something essential, valid, true, then what transpires from these two contradictory claims is only the failure to reconcile these two thoughts: that identity is as abstract identity essential, but that, as such, it is equally incomplete. What is lacking is the awareness of the negative movement as which, in these claims, identity itself is displayed. – Or when this is said, that identity is *identity essentially as separation* from difference or *in the separation from difference*, then right there we have the expressed truth about it, namely that identity consists in being *separation* as such, or in being essentially *in the separation*, that is, it is *nothing for itself* but is rather *moment of separation*.

As to the other confirmation of the absolute *truth of the principle* of identity, this is made to rest on *experience* in so far as appeal is made

to the experience of every consciousness; for anyone presented with this proposition, "A is A," "a tree is a tree," immediately grants it and is satisfied that the proposition is self-evident and in need of no further justification or demonstration.

On the one hand, this appeal to experience, that every consciousness acknowledges the principle universally, is a mere manner of speaking. For nobody will want to say that the abstract proposition, "A is A," has actually been tried out on *every* consciousness. The appeal to actual experience is therefore not in earnest but is rather only an *assurance* that, if the said experiment were made, universal acknowledgment of the proposition would be the result. – And if it is not the abstract proposition as such that is meant, but the proposition *in concrete application*, from which application the abstract proposition would then have to be *developed*, then the claim to the universality and immediacy of the latter would consist in the fact that every consciousness *assumes it or implies it as foundation*, and indeed does so in its every utterance. But the *concrete* and the *application* are precisely in the *reference that connects* simple identity with *a* manifold which is *different* from it. Expressed as a proposition, the concrete would be first of all a synthetic proposition. From this concrete itself, or from the synthetic proposition expressing it, abstraction could indeed extract the principle of identity through analysis; but, in actual fact, it would not then leave *experience* as is but would have *altered* it, since in *experience* the identity was **11.264**
rather in unity with difference. And this is the *immediate refutation* of the claim that abstract identity is as such something true, for what transpires in every experience is the very opposite, namely identity only united with difference.

On the other hand, the experiment with the pure principle of identity is also all too often made, and it demonstrates clearly enough how the truth contained in the principle is regarded. If, for instance, to the question, "What is a plant?," the answer is given, "A plant is . . . a plant," the whole company on which this answer is tried out would both grant it and at the same time unanimously declare that the statement says *nothing*. If anyone opens his mouth and promises to announce what God is, and says that "God is . . . God," expectation is cheated, for a *different determination* was anticipated; and though the proposition is absolute truth, very little is made of such absolute verbiage. Nothing will be held to be more tedious, more aggravating, than a conversation which only chews the cud, however true the cud might nevertheless be.

Let us take a closer look at what makes such a truth tedious. So, the beginning, "The plant is . . . ," makes moves in the direction of saying

something, of adducing a further determination. But since only the same is repeated, the opposite has happened instead, *nothing* has occurred. Such talk of *identity*, therefore, *contradicts itself*. Identity, instead of being in itself the truth and the absolute truth, is thus rather the opposite; instead of being the unmoved simple, it surpasses itself into the dissolution of itself.

More is entailed, therefore, in the *form of the proposition* expressing identity than simple, abstract identity; entailed by it is this pure movement of reflection in the course of which there emerges the other, but only as reflective shine, as immediate disappearing; "A is" is a beginning that envisages a something different before it to which the "A is" would proceed; but the "A is" never gets to it. "A is . . . A": the difference is only a disappearing and the movement goes back into itself. – The propositional form can be regarded as the hidden necessity of adding to abstract identity the extra factor of that movement. – Thus an A is added, a plant or some other substrate, a useless content with no significance; but it constitutes the difference that seems to associate itself by accident. If instead of A or any other substrate, identity itself is assumed – "identity is identity" – it is then thereby admitted that any other substrate could be assumed instead of this identity. Consequently, if appeal is to be made to what appearance indicates, then the result is this:
11.265 that in the expression of identity, difference also immediately emerges; or more precisely, in accordance with what has been said, that this identity is a nothing, is negativity, the absolute difference from itself.

The other expression of the principle of identity, "A cannot be A and not-A at the same time," is in a negative form; it is called the "principle of contradiction." No justification is normally given for how the *form of negation* by which this principle is distinguished from the other comes to identity. – But this form is implied by the pure movement of reflection which identity is, by the simple negativity which is contained in a more developed form by the just stated second formulation of the principle. A is enunciated, and a not-A which is the pure other of A; but this not-A only shows itself in order to disappear. In this proposition, therefore, identity is expressed as a negation of negation. A and not-A are distinct; the two terms are distinguished with reference to one and the same A. Here identity is displayed, therefore, as *this differentiation of the terms in the one connection* or as the *simple difference in the terms themselves*.

From this it is clear that the principle of identity itself, and still more the principle of contradiction, are not of merely *analytical* but of *synthetic* nature. For the latter expresses not only empty, simple self-equality, but the *other* of this self-equality, and not just this *other in general* but as

absolute inequality, *contradiction in itself*. As for the principle of identity itself, we have shown that it entails the movement of reflection, identity as the disappearing of otherness.

Thus the result of this consideration is this: (1) the principle of identity or contradiction, when meant to express merely abstract identity in opposition to difference as a truth, is not a law of thought but expresses rather the opposite of it; (2) these two principles contain *more* than is *meant* by them, namely this opposite, absolute difference itself.

B. DIFFERENCE

1. Absolute difference

Difference is the negativity that reflection possesses in itself, the nothing which is said in identity discourse, the essential moment of identity itself which, as the negativity of itself, at the same time determines itself and is differentiated from difference. **11.266**

1. This difference is difference *in and for itself*, *absolute* difference, *the difference of essence*. – It is difference in and for itself, not difference through something external but *self-referring*, hence *simple*, difference. – It is essential that we grasp absolute difference as *simple*. In the absolute difference of A and not-A from each other, it is the *simple* "not" which, as such, constitutes the difference. Difference itself is a simple concept. "In this," so it is said, "two things *differ*, in that etc." – "In this," that is, in one and the same respect, relative to the same basis of determination. It is the *difference of reflection*, not the *otherness of existence*. One existence and another existence are posited as lying outside each other; each of the two existences thus determined over against each other has an *immediate being* for itself. The *other of essence*, by contrast, is the other in and for itself, not the other of some other which is to be found outside it; it is simple determinateness in itself. Also in the sphere of existence did otherness and determinateness prove to be of this nature, simple determinateness, identical opposition; but this identity showed itself only as the *transition* of a determinateness into the other. Here, in the sphere of reflection, difference comes in as reflected, so posited as it is in itself.

2. Difference in itself is the difference that refers itself to itself; thus it is the negativity of itself, the difference not from another but *of itself from itself*; it is not itself but its other. What is different from difference, however, is identity. Difference is, therefore, itself and identity. The two together constitute difference; difference is the whole and its

moment. – One can also say that difference, as simple difference, is no difference; it is such only with reference to identity; even better, that as difference it entails itself and this reference equally. – Difference is the whole and its own *moment*, just as identity equally is its whole and its moment. – This is to be regarded as the essential nature of reflection and as *the determined primordial origin of all activity and self-movement*. – Both difference and identity make themselves into *moment* or *positedness* because, as reflection, they are negative self-reference.

Difference, thus as unity of itself and of identity, is *internally determined* difference. It is not the transition into another, not reference to another outside it; it has its other, identity, within, and in like manner identity, in being included in the determination of difference, has not lost itself in it as its other but retains itself therein – is the reflection-into-itself of difference,
11.267 its moment.

3. Difference has both these moments, identity and difference; thus the two are both a *positedness*, determinateness. But in this positedness each *refers to itself*. The one, identity, is itself immediately the moment of immanent reflection; but no less is the other, difference, difference in itself, reflected difference. Difference, inasmuch as it has two such moments which are themselves reflections into themselves, is *diversity*.

2. Diversity

1. Identity internally *breaks apart* into diversity because, as absolute difference in itself, it posits itself as the negative of itself and these, its two moments (itself and the negative of itself), are reflections into themselves, are identical with themselves; or precisely because it itself immediately sublates its negating and *is* in its *determination reflected into itself*. The different *subsists* as diverse, indifferent to any other, because it is identical with itself, because identity constitutes its base and element; or, the diverse remains what it is even in its opposite, identity.

Diversity constitutes the otherness as such of reflection. The other of existence has immediate *being*, where negativity resides, for its foundation. But in reflection it is self-identity, the reflected immediacy, that constitutes the subsistence of the negative and its indifference.

The moments of difference are identity and difference itself. These moments are diverse when reflected into themselves, *referring themselves to themselves*; thus, *in the determination of identity*, they are only self-referring; identity is not referred to difference, nor is difference referred to identity; hence, inasmuch as each of these moments is referred only to itself, the two

are *not determined* with respect to each other. – Now because in this way the two are not differentiated within, the *difference* is *external* to them. The diverse moments, therefore, conduct themselves with respect to each other, not as identity and difference, but only as *moments different* in general, indifferent to each other and to their determinateness.

2. In diversity, as the indifference of difference, *reflection* has in general become *external*; difference is only a *positedness* or as sublated, but is itself the whole reflection. – On closer consideration, both, identity and difference are reflections, as we have just established; each is the unity of it and its other, each is the whole. But the determinateness, to be *only* identity or *only* difference, is thus a sublated something. They are not, therefore, qualities, since their determinateness, because of the immanent reflection, **11.268** is at the same time only as negation. What we have is therefore this duplicity, *immanent reflection* as such and determinateness as negation or *positedness*. Positedness is the reflection that is external to itself; it is negation as negation and consequently, indeed *in itself* self-referring negation and immanent reflection, but only in itself, implicitly; its reference is to a something external.

Reflection in itself and external reflection are thus the two determinations in which the moments of difference, identity and difference, are posited. They are these moments themselves as they have determined themselves at this point. – *Immanent reflection* is identity, but determined to be indifferent to difference, not to have difference at all but to conduct itself towards difference as identical with itself; it is *diversity*. It is identity that has so reflected itself into itself that it truly is the *one* reflection of the two moments into themselves; both are immanent reflections. Identity is this one reflection of the two, the identity which has difference within it only as an indifferent difference and is diversity in general. – *External reflection*, on the contrary, is their *determinate* difference, not as absolute immanent reflection, but as a determination towards which the implicitly present reflection is indifferent; its two moments, identity and difference themselves, are thus externally posited, are not determinations that exist in and for themselves.

Now this external identity is *likeness*, and external difference is *unlikeness*. – *Likeness* is indeed identity, but only as a positedness, an identity which is not in and for itself. – *Unlikeness* is equally difference, but an external difference which is not, in and for itself, the difference of the unlike itself. Whether something is like or unlike something else is not the concern of either the like of the unlike; each refers only to itself, each is in and for itself what it is; identity or non-identity, in the sense of

likeness or unlikeness, depend on the point of view of a third external to them.

3. External reflection connects diversity by referring it to likeness and unlikeness. This reference, which is a *comparing*, moves back and forth from likeness to unlikeness and from unlikeness to likeness. But this back and forth referring of likeness and unlikeness is external to these determinations themselves; moreover, they are not referred to each other, but each, for itself, is referred to a third. In this alternation, each immediately stands out on its own. – External reflection is as such external to itself; *determinate* difference is negated absolute difference; it is not simple difference, therefore, not an immanent reflection, but has this reflection outside it; hence its moments come apart and both refer, each also outside the other, to the immanent
11.269 reflection confronting them.

In reflection thus alienated from itself, likeness and unlikeness present themselves, therefore, as themselves unconnected, and reflection *keeps* them *apart*, for it refers them *to one and the same something* by means of "in so far," "from this side or that," and "from this view or that." Thus diverse things that are one and the same, when likeness and unlikeness are said of them, are *from one side* like each other, but from *another side* unlike, and *in so far as* they are alike, *to that extent* they are not unlike. *Likeness* thus refers only to itself, and *unlikeness* is equally only unlikeness.

Because of this separation from each other, they sublate themselves. Precisely that which should save them from contradiction and dissolution, namely that something is *like* another in *one respect* but *unlike in another* – precisely this keeping of likeness and unlikeness apart, is their destruction. For both are determinations of difference; they are references to each other, each intended to be what the other is not; the like is not the unlike, and the unlike is not the like; both have this connecting reference essentially, and have no meaning outside it; as determinations of difference, each is what it is as *different* from its other. But because of their indifference to each other, the likeness is referred to itself, and similarly is unlikeness a point of view of its own and a reflection unto itself; each, therefore, is like itself; difference has vanished, since they have no determinateness to oppose them; in other words, each is consequently only likeness.

Accordingly, this indifferent viewpoint or the external difference sublates itself and it is in itself the negativity of itself. It is the negativity which in comparing belongs to that which does the comparing. This latter oscillates from likeness to unlikeness and back again; hence it lets the one disappear into the other and is in fact *the negative unity of both*. This negative unity transcends at first what is compared as well as the moments of the

comparing as a subjective operation that falls outside them. But the result is that this unity is in fact the nature of likeness and unlikeness themselves. Even the independent viewpoint that each of these is, is rather the self-reference that sublates their distinctness and so, too, themselves.

From this side, as moments of external reflection and as external to themselves, likeness and unlikeness disappear together into their likeness. But this, their *negative* unity, is in addition also *posited* in them; for their reflection *implicitly exists* outside them, that is, they are the likeness and unlikeness *of a third*, of another than they themselves are. Thus the like is not the like of itself, and the unlike, as the unlike not of itself but of an unlike to it, is itself the like. The like and the unlike is each therefore the *unlike of itself*. Each is thereby this reflection: likeness, that it is itself and **II.270**
the unlikeness; unlikeness, that it is itself and the likeness.

Likeness and unlikeness constituted the side of *positedness* as against what is being compared or the diverse which, as contrasted with them, had determined itself as *implicitly existent reflection*. But this *positedness* has consequently equally lost its determinateness as against this reflection. Likeness and unlikeness, the determinations of external reflection, are precisely the merely implicitly existent reflection which the diverse as such was supposed to be, its only indeterminate difference. *Implicitly existent* reflection is self-reference without negation, abstract self-identity and therefore positedness itself. – The merely diverse thus passes over through the positedness into negative reflection. The diverse is difference which is merely posited, hence a difference which is no difference, hence a negation that negates itself within. Likeness and unlikeness themselves, the positedness, thus return through indifference or through implicitly existing reflection back into negative unity with themselves, into the reflection which is the implicit difference of likeness and unlikeness. Diversity, the *indifferent* sides of which are just as much simply and solely *moments* of a negative unity, is *opposition*.

Remark

Diversity, like identity, is expressed in a proposition of its own. But the two propositions otherwise remain indifferent to each other, each valid on its own irrespective of the other.

"All things are different," or "No two things are alike." – This principle is in fact opposed to the principle of identity, for it says: "A is something distinctive, therefore A is also not-A"; or, "A is unlike another, hence it is not A in general but rather a distinctive A." In the proposition expressing identity, the A can be replaced by any other substrate, but when A is

something distinctive, it cannot be interchanged with anything else. Of course it is not supposed to be different *from itself*, but only *from some other*; but this diversity is its own determination. As self-identical, A is indeterminateness; but as determinate it is the opposite thereof; it no longer has only self-identity but also carries a negation within, and hence a difference within it of itself from itself.

That everything is different from everything else is an altogether superfluous proposition, for in the plural of things there is already implied a multitude and totally indeterminate diversity. – The principle, however, "There are no two perfectly like things," expresses more than that, for it
II.271 expresses *determinate* difference. Two things are not merely two (numerical multiplicity is only the repetition of one) but are rather differentiated *by a determination*. The proposition that there are no two things which are like each other strikes the imagination as strange – as in the anecdote about the court where Leibniz propounded it, occasioning the ladies to search among the leaves of trees to see whether two alike could be found. – Happy times for metaphysics those, when it was practiced at court and no greater effort was called for to demonstrate its propositions than to compare the leaves of trees! – The reason why the principle strikes us as strange lies in what has just been said, namely because "two," or any numerical plurality, does not yet contain *a diversity which is determinate*, and because diversity as such, taken in abstraction, is at first indifferent with respect to likeness and unlikeness. Ordinary thinking, when it goes on to determine it, assumes that these two moments are themselves indifferent to each other, so that each is sufficient for the determination without the other, *the mere likeness* of things sufficient *without their unlikeness* – as if the things would be diverse even if only numerically many, diverse in general without being unequal. The law of diversity, on the contrary, proclaims that things are diverse from each other by virtue of unlikeness, that the determination of unlikeness belongs to them just as much as that of likeness, for only the two together constitute determinate difference.

Now this proposition, that the determination of unlikeness pertains to all things, is surely in need of demonstration; it cannot be advanced as an immediate proposition, for it is the ordinary norm of cognition itself to require a demonstration for linking diverse determinations together into one synthetic proposition, or to indicate some third term in which such determinations are mediated. Such a demonstration would have to display the transition from identity to diversity, and the transition then from diversity to determinate diversity, to unlikeness. But this is not ordinarily done. The demonstration would follow from the fact that diversity or

external difference is in truth reflected into itself, is difference within; that the indifferent subsistence of the diverse is a mere positedness and therefore not external, indifferent difference, but *one* reference of the two moments.

In this lies also the dissolution, the nothingness, of the *law of diversity*. Two things are not perfectly alike. So they are at the same time alike and unlike – alike, by the very fact that they are things, or two in general, for each is a thing or a one just as well as any other, and each is therefore the same as the other; unlike, however, *ex hypothesi*. What we then have is this determination, that the two moments, likeness and unlikeness, are different *in one and the same thing*, or that their differentiating difference is at the same time one and the same reference. Here is where we have the transition into *opposition*. **II.272**

The "at the same time" of the two predicates will indeed be held fragmented by means of the "in so far": two things are *in so far like*, *in so far* unlike; or they are alike from one *side* and *viewpoint*, but unlike from another. In this way, the unity of likeness and unlikeness is kept away from a thing, and what would be the thing's own reflection and the immanent reflection of likeness and unlikeness is fixed as a reflection external to the thing. But it is this reflection which, *in one and the same activity*, distinguishes the two sides of likeness and unlikeness, by the same token contains them in *one activity*, and lets the one shine reflected into the other. – The ordinary tenderness for things, the overriding worry of which is that they do not contradict themselves, forgets instead, here as elsewhere, that contradiction is not thereby dissolved but is rather shoved elsewhere, into subjective or external reflection; forgets that the two moments of this reflection, of which it speaks as assumed facts in its effort at removing them or displacing them, are in fact contained in it as sublated, and each referring to the other in *one* unity.

3. Opposition

In opposition, the *determinate reflection*, difference, is brought to completion. Opposition is the unity of identity and diversity; its moments are diverse in *one* identity, and so they are *opposites*.

Identity and *difference* are the moments of difference as held inside difference itself; they are *reflected* moments of its unity. *Likeness* and *unlikeness* are instead the externalized reflection; their self-identity is not only the indifference of each towards the other differentiated from it, but towards being-in-and-for-itself as such; theirs is a self-identity that contrasts with

identity reflected into itself, hence an *immediacy* which is not reflected into itself. The positedness of the sides of external reflection is therefore a *being*, just as their non-positedness is a *non-being*.

On closer consideration, the moments of opposition are positedness reflected into itself or determination in general. Positedness is likeness and unlikeness; these two, reflected into themselves, constitute the determinations of opposition. Their immanent reflection consists in that each is within it the unity of likeness and unlikeness. Likeness is only in a reflection which compares according to the unlikeness and is therefore mediated by its other indifferent moment; similarly, unlikeness is only in the same reflective reference in which likeness is. – Each of these moments, in its determinateness, is therefore the whole. It is the whole because it also con-
II.273 tains its other moment; but this, its other, is an indifferent *existent*; thus each contains a reference to its non-being, and it is reflection-into-itself, or the whole, only as essentially referring to its non-being.

This self-*likeness*, reflected into itself and containing the reference to unlikeness within it, is the *positive*; and the *unlikeness* that contains within itself the reference to its non-being, to likeness, is the *negative*. – Or again, both are *positedness*; now in so far as the differentiated determinateness is taken as a differentiated *determinate reference* of positedness *to itself*, opposition is, on the one hand, *positedness* reflected into its *likeness with itself*; and, on the other hand, it is the same positedness reflected into its inequality with itself: the *positive* and the *negative*. – The *positive* is positedness as reflected into self-likeness; but what is reflected is positedness, that is, the negation as negation, and so this immanent reflection has the reference to the other for its determination. The *negative* is positedness as reflected into unlikeness; but positedness is the unlikeness itself, and so this reflection is therefore the identity of unlikeness with itself and absolute self-reference. – Each, therefore, equally has the other in it: positedness reflected into self-likeness has the unlikeness; and positedness reflected into self-unlikeness, the likeness.

The positive and the negative are thus the sides of opposition that have become self-subsisting. They are self-subsisting because they are the reflection of the *whole* into itself, and they belong to opposition in so far as the latter is *determinateness* which, as the whole, is reflected into itself. Because of their self-subsistence, the opposition which they constitute is *implicitly* determinate. Each is itself and its other; for this reason, each has *its determinateness* not in an other but *within*. – Each refers itself to itself only as referring itself to its other. This has a twofold aspect. Each

is the reference to its non-being as the sublating of this otherness in itself; its non-being is thus only a moment in it. But, on the other hand, here positedness has become a being, an indifferent subsistence; the other of itself which each contains is therefore also the non-being of that in which it should be contained only as a moment. Each is, therefore, only to the extent that its *non*-being *is*, the two in an identical reference.

The determinations which constitute the positive and the negative consist, therefore, in that the positive and the negative are, *first*, absolute *moments* of opposition; their subsistence is indivisibly *one* reflection; it is one mediation in which each is by virtue of the non-being of its other, hence by virtue of its other or its own non-being. – Thus they are simply *opposites*; or *each* is only the opposite of the other; the one is not yet the positive and the other not yet the negative, but both are negative with respect to each other. Each, therefore, simply is, *first*, *to the extent that the* **II.274** *other is*; it is what it is by virtue of the other, by virtue of its own non-being; it is only *positedness*. *Second*, it is *to the extent that the other is not*; it is what it is by virtue of the non-being of the other; it is *reflection into itself*. – The two, however, are both the *one* mediation of opposition as such in which they simply are only *posited moments*.

Moreover, this mere *positedness* is reflected into itself in general and, according to this moment of *external reflection*, the positive and the negative are *indifferent* towards this first identity where they are only moments; or again, because that first reflection is the positive's and the negative's own reflection into itself, each is indifferent towards its reflection into its non-being, towards its own positedness. The two sides are thus merely diverse, and because their determinateness – that they are positive or negative – constitutes their positedness as against each other, each is not specifically so determined internally but is only determinateness in general; to each side, therefore, there belongs indeed one of the two determinacies, the positive or the negative; but the two can be interchanged, and each side is such as can be taken equally as positive or negative.

But, *in third place*, the positive and the negative are not only a posited being, nor are they something merely indifferent, but their *positedness*, or the *reference to the other in the one unity* which *they themselves are not*, is rather *taken back* into each. Each is itself positive and negative within; the positive and the negative are the determination of reflection in and for itself; only in this reflection of the opposite into itself is the opposite either positive or negative. The positive has within it the reference to the other in which the determinateness of the positive consists. And the same applies

to the negative: it is not negative as contrasted with another but has the determinateness by which it is negative within.

Each is thus self-subsistent unity existing for itself. The positive is indeed a positedness, but in such a way that the positedness is for it posited being as sublated. It is the *non-opposed*, the sublated opposition, but as the side of the opposition itself. – As positive, it is indeed a something which is determined with reference to an otherness, but in such a way that its nature is not to be something posited; it is the immanent reflection that negates otherness. But its other, the negative, is itself no longer positedness or a moment but itself a self-subsisting *being*; and so the negating reflection of the positive is internally determined *to exclude* this being, which is its *non-being*, from itself.

Thus the negative, as absolute reflection, is not the immediate negative but is the negative as sublated positedness, the negative in and for itself
11.275 which positively rests upon itself. As immanent reflection, it negates its reference to its other; its other is the positive, a self-subsisting being – hence its negative reference to this positive is the excluding of it from itself. The negative is the independently existing opposite, over against the positive which is the determination of the sublated opposition – the *whole opposition* resting upon itself, opposed to the self-identical positedness.

The positive and the negative are such, therefore, not just *in themselves*, but in and for themselves. They are *in themselves* positive and negative when they are abstracted from their excluding reference to the other and are taken only in accordance with their determination. Something is *in itself* positive or negative when it is not supposed to be determined as positive or negative merely *in contrast with the other*. But the positive and the negative, taken not as a positedness and hence not as opposed, are each an immediate, *being* and *non-being*. They are, however, moments of opposition: their in-itself constitutes only the form of their immanent reflectedness. Something is said to be positive *in itself*, outside the reference to something negative, and something *negative in itself*, outside the reference to something negative: in this determination, merely the abstract moment of this reflectedness is held on to. However, to say that the positive and the negative *exist in themselves* essentially implies that to be opposed is not a mere moment, nor that it is just a matter of comparison, but that it is the determination *of* the sides *themselves* of the opposition. The sides, as positive or negative *in themselves*, are not, therefore, outside the reference to the other; on the contrary, *this reference*, precisely as exclusive, constitutes their determination or their in-itselfness; in this, therefore, they are at the same time in and for themselves.

Remark

Mention must be made here of the concept of the *positive* and *negative* as it occurs in arithmetic. The concept is presupposed there as known, but, since it is not grasped in its specific difference, it is not immune to insoluble difficulties and complications. We have just seen how the two *real* determinations of the positive and negative, outside the simple concept of their opposition, come to be. Namely, only a differentiated immediate existence stands *in a first instance* as ground, the simple immanent reflection of which is distinguished from its positedness, from the opposition itself. This opposition, therefore, does not count as anything which is in and for itself, and, although it does apply to its diverse sides so that each is an opposite in general, the sides remain nonetheless indifferent to it and it is a matter of indifference which of the two is regarded as positive or negative. – **11.276**
In a second instance, the positive is however the positive in itself, and the negative is the negative in itself, so that the two diverse sides are not indifferent to their respective determination but each is that determination in and for itself. – We see these two forms of the positive and the negative occur in arithmetic in the very first applications of them.

In a first sense, the $+a$ and $-a$ are simply *opposite magnitudes*; the a is the *unit that stands by itself* at the base of both – itself indifferent towards the opposition and serving here as an inert foundation, without further conceptual consideration. The $-a$ is indeed designated as the negative, the $+a$ as the positive; but *the one* is just as much an *opposite* as *the other*.

In yet another sense, the a is not only the *simple* unit serving as the foundation but, as $+a$ and $-a$, it is the reflection of these opposites into themselves; there are *two different a*s at hand, and it is indifferent which of the two is designated as the positive or the negative; each has a particular self-subsistence and is positive.

According to the first sense, $+y$ and $-y = 0$; or, in $-8 + 3$, the positive 3 are negatives in the 8. The opposites cancel themselves in combination. A one-hour march is made to the East, and an equal march back to the West undoes it; so many are the debts pending, that many less assets are available; so many are the assets available, that many debts are absolved. The one-hour march to the East is not in itself a positive march; nor is the march to the West a negative march; the directions are rather indifferent to this determinateness of opposition; only a third standpoint external to both makes a positive of the one and a negative of the other. So also debts are not a negative in and for themselves but are such only with reference to the one in debt; for the creditor, they are a positive asset; they are a

sum of money, or anything else of a given value, which, in accordance with standpoints external to it, is either debt or asset.

The opposites do indeed cancel themselves in reference to each other, the result being equal to zero; but there is also present in them *their identical reference*[3] which is itself indifferent to the opposition; so the two constitute a *one*. The same goes for the sum of money just mentioned, which is only *one* sum; or for the *a*, which is only *one a* whether in $+a$ or $-a$; and for the one-hour march as well, which covers *one* stretch of road, whether in the direction of East or West. And the same applies to an ordinate *y*, which is the same whether taken on one side or the other of the axis; hence, $+y - y = y$; it is only *one* ordinate with only *one* determination and law
II.277 for it.

But, in the second sense, the opposites are not only *one* indifferent something but also *two indifferent somethings*. For, as opposites, they are also reflected into themselves and thus stand as diverse.

Thus in $-8 +3$ there are eleven units altogether; $+y$, $-y$, are ordinates on opposite sides of the axis, where each is an existence indifferent to this limit and to their opposition; in this sense, $+y - y = 2y$. – Also the road covered from East to West and back is the sum of a twofold effort or the sum of two time periods. Likewise in the economy of a state, a quantum of money or of assets is not just this one quantum as a means of subsistence but is rather doubled; it is a means of subsistence for both creditor and debtor. The capital of a state is calculated not merely as the sum of cash and of other real or liquid assets available to it; even less so as the sum of what is left over after subtracting passive from active assets; for the capital rather, even if its active and passive accounts nullify each other, remains, *first*, positive capital, as $+a - a = a$; and, *second*, since it is passive in a variety of ways, by being lent many times over, it is thereby a resource many times over.

But not only are opposite magnitudes, on the one hand, just merely opposed, and, on the other hand, real or indifferent. For although quantum itself is being indifferent to limit, the positive in itself and the negative in itself do also occur in it. Take the *a*, for instance, with no sign designation. If a sign is required, the presumption is that the *a* is positive. If opposition is required, though only in general, then it can just as well be taken as $-a$. But the positive sign is the one given to it immediately, for the positive carries as such the particular meaning of the immediate, as self-identical, in contrast to the opposition.

[3] *identische Beziehung*.

Further, inasmuch as positive and negative magnitudes are added or subtracted, they count as positive or negative for themselves, not as acquiring this value externally, merely through the connective[4] of addition or subtraction. In $8 - (-3)$, the first minus means "opposite to 8," but the second, the (-3), has the value of something opposed *in itself*, outside the reference to 8.

This is even more apparent in multiplication and division. Here we must take the positive as essentially the *not-opposite* and the negative, on the contrary, as the *opposite*, not both determinations equally as just opposites in general. In the textbooks of arithmetic, the demonstrations of how the signs function in these two types of reckoning do not go past the concept of opposite magnitudes in general, and for this reason they remain incomplete **II.278** and land themselves in contradictions. – In multiplication and division the plus and the minus obtain the more specific meaning of the positive and the negative in itself, because the relation of "unit" and "amount" in which the factors stand to each other is not a mere relation of the more and less, as in addition and subtraction, but is a qualitative relation, and for this reason the plus and minus also obtain the qualitative meaning of the positive and the negative. – Without this determination and merely from the concept of opposite magnitudes, the false conclusion can easily be drawn that, if $-a \cdot +a = -a^2$, then contrariwise $+a \cdot -a = +a^2$. Since one factor indicates the "amount" and the other the "unit," and the "amount" is usually indicated by the factor that comes first, the two expressions, $-a \cdot +a$ and $+a \cdot -a$, are distinguished by the fact that in the first the $+a$ is the unit and $-a$ the amount, and the contrary is the case in the other. Now it is common to say with respect to the first expression that if I am to take $+a$ (the unit) $-a$ times, then I take it not merely a times but also in the manner opposite to it, $+a$ times $-a$; therefore, since the a is plus, I have to take it negatively, and the product is $-a^2$. But if, in the second case, $-a$ is to be taken $+a$ times, then $-a$ should equally be taken not $-a$ times but in the determination opposite to it, namely $+a$ times. Therefore, on the argument of the first case the product would have to be $+a^2$. – The same goes for division.

This is the conclusion that necessarily follows when we take plus and minus as opposite magnitudes in general; in the first case, to the minus is attributed the power of altering the plus; yet in the second case the plus is supposed not to have the same power over the minus, despite the fact that it is as good an *opposite* determination of magnitude as the minus.

[4] *Beziehung.*

In point of fact, the plus does not have this power, for it is to be taken here according to its qualitative determination as against the minus, since the factors stand in qualitative relation to each other. For this reason, the negative here is therefore the inherently opposite as such, but the positive is the indeterminate, the indifferent in general; it, too, is indeed the negative, but the negative of the other, not a negative within it. – A determination of negation thus derives solely by virtue of the negative at hand, not by virtue of the positive.

And so $-a \cdot -a = +a^2$, because the negative $-\alpha$ is not to be taken merely in the opposite manner (as it would have to be taken when multiplied $-a$ times), but because it is to be taken negatively. But the negation
11.279 of the negation is the positive.

C. CONTRADICTION

1. *Difference* in general contains both its sides as *moments*; in *diversity*, these sides fall apart as *indifferent* to each other; and in *opposition* as such, they are the moments of difference, each determined by the other and hence only moments. But in opposition these moments are equally determined within, indifferent to each other and mutually exclusive, *self-subsisting determinations of reflection*.

One is the *positive* and the other the *negative*, but the former as a positive which is such within, and the latter as a negative which is such within. Each has indifferent self-subsistence for itself by virtue of having the reference to its other moment within it; each moment is thus the whole self-contained opposition. – As this whole, each moment is self-mediated *through its other* and *contains* this other. But it is also self-mediated through *the non-being of its other* and is, therefore, a unity existing for itself and *excluding* the other *from* itself.

Since the self-subsisting determination of reflection excludes the other in the same respect as it contains it and is self-subsisting for precisely this reason, in its self-subsistence the determination excludes its own self-subsistence from itself. For this self-subsistence consists in that it contains the determination which is other than it in itself and does not refer to anything external for just this reason; but no less immediately in that it is *itself* and excludes from itself the determination that negates it. And so it is *contradiction*.

Difference as such is already *implicitly* contradiction; for it is the *unity* of beings which are, only in so far as they are *not one* – and it is the *separation* of beings which are, only in so far as they are separated *in the*

same reference connecting them. The positive and the negative, however, are the *posited* contradiction, for, as negative unities, they are precisely their self-positing and therein each the sublating of itself and the positing of its opposite. – They constitute determining reflection as *exclusive*; for the excluding is *one* act of distinguishing and each of the distinguished beings, as exclusive, is itself the whole act of excluding, and so each excludes itself internally.

If we look at the two self-subsisting determinations of reflection on their own, the positive is *positedness* as reflected *into likeness with itself* – positedness which is not reference to another, hence subsistence inasmuch as the positedness is *sublated* and *excluded*. But with this the positive makes itself into the *reference of a non-being* – into a *positedness*. – In this way the **11.280**
positive is contradiction – in that, as the positing of self-identity by the *excluding* of the negative, it makes itself into a *negative*, hence into the other which it excludes from itself. This last, as excluded, is posited free of the one that excludes; hence, as reflected into itself and itself as excluding. The reflection that excludes is thus the positing of the positive as excluding the other, so that this positing immediately is the positing of its other which excludes it.

This is the absolute contradiction of the positive; but it is immediately the absolute contradiction of the negative; the positing of both in *one* reflection. – Considered in itself as against the positive, the negative is positedness *as* reflected *into unlikeness to itself*, the negative as negative. But the negative is itself the unlike, the non-being of another; consequently, reflection is in its unlikeness its reference rather to itself. – Negation *in general* is the negative as quality or *immediate* determinateness; but taken *as negative*, it is referred to the negative of itself, to its other. If this second negative is taken only as identical with the first, then it is also only immediate, just like the first; they are not taken, therefore, as each the other of the other, hence not as negatives: the negative is not at all an immediate. – But now, since each is moreover equally the same as what the other is, this reference connecting them as unequal is just as much their identical connection.

This is therefore the same contradiction which the positive is, namely positedness or negation as self-reference. But the positive is only *implicitly* this contradiction, is contradiction only *in itself*; the negative, on the contrary, is the *posited* contradiction; for in its reflection into itself, as a negative which is in and for itself or a negative which is identical with itself, its determination is to be the not-identical, the exclusion of identity. The negative is this, to be *identical with itself over against identity*, and

consequently, because of this excluding reflection, to exclude itself from itself.

The negative is therefore the whole opposition – the opposition which, as opposition, rests upon itself; distinction that absolutely *does not refer itself to another*; distinction which, as opposition, excludes identity from itself, but thereby also excludes itself, for as *reference to itself* it determines itself as the very identity which it excludes.

2. Contradiction resolves itself.

In the self-excluding reflection we have just considered, the positive and the negative, each in its self-subsistence, sublates itself; each is simply the passing over, or rather the self-translating of itself into its opposite. This internal ceaseless vanishing of the opposites is the *first unity* that arises by
11.281 virtue of contradiction; it is the *null*.

But contradiction does not contain merely the *negative*; it also contains the *positive*; or the self-excluding reflection is at the same time *positing* reflection; the result of contradiction is not only the null. – The positive and the negative constitute the *positedness* of the self-subsistence; their own self-negation sublates it. It is this *positedness* which in truth founders to the ground in contradiction.

The immanent reflection by virtue of which the sides of opposition are turned into self-subsistent self-references is, first of all, their self-subsistence as *distinct* moments; thus they are this self-subsistence only *in themselves*, for they are still opposites, and that they are *in themselves* self-subsistent constitutes their positedness. But their excluding reflection sublates this positedness, turns them into self-subsistent beings existing in and for themselves, such as are self-subsistent not only *in themselves* but by virtue of their negative reference to their other; in this way, their self-subsistence is also posited. But, further, by thus being posited as self-subsistent, they make themselves into a positedness. *They fate themselves to founder*, since they determine themselves as self-identical, yet in their self-identity they are rather the negative, a self-identity which is reference-to-other.

However, on closer examination, this excluding reflection is not only this formal determination. It is self-subsistence *existing in itself*, and the sublating of this positedness – is only through this sublating a unity that exists for itself and is in fact self-subsistent. Of course, through the sublating of otherness or positedness, positedness or the negative of an other is indeed present again. But in fact, this negation is not just a return to the first immediate reference to the other, is not positedness as sublated immediacy, but positedness as sublated positedness. The excluding reflection of self-subsistence, since it is excluding, makes itself a positedness but is just as

much the sublation of its positedness. It is sublating reference to itself; in that reference, it *first* sublates the negative and it *secondly* posits itself as a negative, and it is only this posited negative that it sublates; in sublating the negative, it both posits and sublates it at the same time. In this way the *exclusive determination* is *itself that other* of itself of which it is the negation; the sublation of this positedness is not, therefore, once more positedness as the negative of an other, but is self-withdrawal, positive self-unity. Self-subsistence is thus unity that turns back into itself by virtue of *its own* negation, for it turns into itself through the negation of *its* positedness. It is the unity of essence – to be identical with itself through the negation not of an other, but of itself.

3. According to this positive side, since self-subsistence in opposition, as excluding reflection, makes itself into a positedness and equally sublates **11.282** this positedness, not only has opposition *foundered* but in foundering it has gone back *to its foundation*, *to its ground*. – The excluding reflection of the self-subsisting opposition turns it into a negative, something only posited; it thereby reduces its formerly self-subsisting *determinations*, the positive and the negative, to determinations which are *only determinations*; and the positedness, since it is now made into positedness, has simply gone back to its unity with itself; it is *simple essence*, but essence as *ground*. Through the sublating of the determinations of essence, which are in themselves self-contradictory, essence is restored, but restored in the determination of an exclusive, reflective unity – a simple unity which determines itself as negation, but in this positedness is immediately like itself and withdrawn into itself.

In the first place, therefore, because of its contradiction, the self-subsisting opposition *goes back into a ground*; this opposition is *what comes first*, the immediate from which the beginning is made, while the sublated opposition or the sublated positedness is itself a positedness. Accordingly, *essence is as ground a positedness*, *something that has become*. But conversely, only this has been posited, namely that the opposition or the positedness is something sublated, only is as positedness. As ground, therefore, essence is excluding reflection because it makes itself into a positedness; because the opposition from which the start was just now made and was the immediate is the merely posited determinate self-subsistence of essence; because opposition only sublates itself within, whereas essence is in its determinateness reflected into itself. As ground, therefore, essence excludes *itself* from itself, it posits *itself*; its positedness – which is what is excluded – is only as positedness, as identity of the negative with itself. This self-subsistent is the negative *posited* as the negative, something

self-contradictory which, consequently, remains in the essence as in its ground.

The resolved contradiction is therefore ground, essence as unity of the positive and the negative. In opposition, determinateness has progressed to self-subsistence; but ground is this self-subsistence as completed; in it, the negative is self-subsistent essence, but as negative; and, as self-identical in this negativity, ground is thus equally the positive. In ground, therefore, opposition and its contradiction are just as much removed as preserved. Ground is essence as positive self-identity which, however, at the same time refers itself to itself as negativity and therefore determines itself, making itself into an excluded positedness; but this positedness is the whole self-subsisting essence, and essence is ground, self-identical in its negation and positive. The self-contradictory self-subsistent opposition was itself, therefore, already ground; all that was added to it was the determination
11.283 of self-unity which emerges as each of the self-subsisting opposites sublates itself and makes itself into its other, thereby founders and sinks to the ground but therein also reunites itself with itself; thus in this foundering, that is, in its positedness or in the negation, it rather is for the first time the essence that is reflected into itself and self-identical.

Remark 1

The positive and the negative are the same. This is a maxim of *external reflection*, for it sets up a *comparison* between the two terms. But it is not an external comparison that should be drawn between them or, for that matter, between any two other categories. The categories must rather be considered on their own, that is to say, it is their own reflection that must be considered. And we have seen in this reflection that each is the reflective shining of itself in the other, and itself the positing of itself as the other.

Superficial thought that does not consider the positive and the negative as they are in themselves can of course be made aware of the instability of these distinct terms, which it assumes to be fixed in their opposition to each other, by being referred to the act of comparing. The most cursory experiment in reflective thought will demonstrate that, if something is determined as a positive and is then taken as the starting point, this same something will have immediately turned in the process into a negative and, *vice versa*, anything negatively determined will have turned into a positive; it will demonstrate that reflective thinking gets confused and runs into contradictions in these determinations. Ignorance of their nature will interpret this confusion as a misstep that should not occur, and will ascribe it to a subjective failure. Indeed, the shifting back and forth from one

determination to the other will remain mere confusion as long as there is no awareness of the necessity of the alternation. – But even to external reflection it will be a matter of simple consideration that the positive, to start with, is not a simple identity but is rather, on the one hand, opposed to the negative – has meaning only in this reference to it and therefore entails the negative *in its very concept* – and, on the other hand, is inherently the self-referring negation of mere positedness or of the negative and therefore is itself implicitly the *absolute negation*. – Similarly, the negative that stands over against the positive has meaning only in thus referring to its other; it contains it, therefore, *in its concept*. But the negative has *a self-subsistence of its own* also without the reference to the positive; it is self-identical; thus it is itself what the positive was supposed to be. **11.284**

The opposition of positive and negative is normally taken in the sense that the former (even though its name conveys *positedness*) is to be supposed as objective; the latter, instead, as something subjective that only belongs to an external reflection and has nothing to do with what exists objectively in and for itself, even is for the latter nothing at all. And in fact, if the negative only expressed a subjectively arbitrary abstraction or a determination of external comparison, then it would indeed be for the positive nothing at all, that is, there would be no reference in the positive to such an empty abstraction; but then its determination, that it is a positive, would equally be only external to it. – As an example of the fixed opposition of these determinations of reflection, take *light* in general to be the solely positive, and *darkness* the solely negative. But light has, in its unending expansion and power to suscitate and vivify, the nature of absolute negativity. Darkness, on the other hand, as a non-manifold or as the non-self-differentiating womb of generation, is simple self-identity, the positive. In the way it is taken, it is only a negative, in the sense that it is the mere absence of light, nothing at all for itself, so that light, in referring to it, would not be referring to another but purely to itself, would therefore simply disappear before it. But surely light is dimmed to gray by darkness; and, besides this merely quantitative alteration, it also suffers the qualitative one of being determined as color by referring to darkness. – So also *virtue*, for example, is not without struggle; it is rather the highest, the perfect struggle, and thus not only a positive but rather absolute negativity; virtue is virtue, not just *by comparison* to vice, but for the opposition and the combat *in it*. Or again, *vice* is not only *the lack* of virtue – innocence too is such a lack – and distinct from virtue not just in the eyes of an external reflection, but is opposed to virtue in itself; it is *evil*. Evil consists in maintaining one's own ground as against the good; it is positive negativity. Innocence, on

the other hand, as the lack of both good and evil, is indifferent to these determinations – is neither positive nor negative. But at the same time this lack must be taken also as a determinateness and, as such, on the one hand it is to be considered as the positive nature of something just as, on the other, as referring to an opposite. And thus all natures fall from innocence, from their indifferent self-identity; because of what they are in themselves they refer to their other, and therefore they cause themselves to founder,
11.285 or, positively expressed, they return to their ground. – *Truth* also is the positive as the knowledge that agrees with the object, but it is this likeness to itself only in so far as knowledge has related itself negatively to the other, has penetrated the object and sublated the negation which the latter is. *Error* is something positive as the self-aware and deliberate assertion of something which has no existence in and for itself. Ignorance, for its part, is either something indifferent to truth and error – hence neither positively nor negatively determined, its determination a lack and thus the domain of external reflection – or, objectively taken as the defining determination of a nature, an instinct that is directed against itself, a negative containing a positive direction within it. – To perceive and to be mindful of this nature of the determinations of reflection is among the most important steps in cognition: that their truth consists only in their reference to one another, and hence that each contains the other within its very concept. Without this recognition, no proper step in philosophy can be made.

Remark 2

The determination of opposition has equally been made into a proposition, the so-called "Principle of the Excluded Middle."

Something is either A or not-A; there is no third.

This principle contains, *first*, that everything is an *opposite*, *determined* either as positive or as negative. – It is an important principle, necessary because identity passes over into diversity and diversity into opposition. But this is not the sense in which it is normally understood, for its ordinary meaning amounts rather to just this, that of all predicates, either this one here or its non-being comes to a thing. Here the opposite of the predicate signifies a mere lack or rather *indeterminateness*; and the principle is so insignificant that it is hardly worth the effort of enunciating it. If the predicates "green," "sweet," "square," are taken – and it is assumed that they are all taken – and then it is said of spirit that it is either sweet or not-sweet, green or not-green, and so on, this is a triviality that leads nowhere. Determinateness, the predicate, is referred to something; "this something is determined," the principle says. Now what the principle ought essentially

to imply is that the determinateness should further determine itself, that it become determinateness *in itself*, opposition. Instead of this, however, it only goes, in the trivial sense just mentioned, from determinateness over to its non-being in general, goes back to indeterminateness.

The principle of the excluded middle is further distinguished from the previously examined principles of identity or contradiction that said, "Nothing is A and not-A at the same time." What this implies is that *there* **11.286** *is* nothing which is not *either A or not-A*; that there is no third that would be indifferent to that opposition. But in fact a third indifferent to it *is given* in the principle itself, for the A itself is there. This A is neither +A nor –A and just as much also +A and –A. – The something which ought to have been either +A or –A is here attached to the +A as well as the –A; and again, inasmuch as it is attached to the A, it ought *not* to be attached to the –A, just as it ought not to be attached to the A inasmuch as it is to the not-A. The something itself is therefore the third which ought to have been excluded. Since in this something the opposite determinations are equally posited and sublated, that third which is here in the shape of an inert something, when taken more profoundly, is the unity of the reflection into which the opposition returns as into ground.

Remark 3

Now if the first determinations of reflection, identity, diversity, and opposition, have been formulated each as a principle,[5] all the more should the one determination into which they pass over as in their truth, namely *contradiction*, be grasped and enunciated as a principle: "All things are in themselves contradictory," in the sense, moreover, that as contrasted with the other this proposition expresses rather the truth and the essence of things. – The contradiction that emerges in opposition is only the developed nothing which is contained in identity and came to the fore in the claim that the principle of identity says *nothing*. This negation further determines itself into difference and into opposition, which is now the posited contradiction.

It is, however, one of the basic prejudices of previous logic and of ordinary thought that contradiction is not as essential and immanent a determination as identity. But in fact, if order of precedence were an issue, and the two determinations were to be held separate, it would be the principle of contradiction that should be taken as the more profound and the more essential. For in contrast to it, identity is only the determination

[5] Cf. above, 11.258, 270, 285.

of simple immediacy, of inert being, whereas contradiction is the root of all movement and life; it is only in so far as something has a contradiction within it that it moves, is possessed of instinct and activity.

Contradiction is ordinarily the first to be kept away from things, away from any existent and from the true; as the saying goes, *there is nothing*
11.287 *contradictory*. For the rest, it is relegated to subjective reflection which allegedly first posits it by way of reference and comparison. And even within this reflection it is not really there, for the *contradictory* cannot supposedly be *represented* or *thought*. Whether it occurs in actuality or in the reflection of thought, it is universally reckoned as an accident, an abnormality as it were, a momentary fit of sickness.

Now as regards the claim that *there is* no contradiction, that none is to be found, we need not worry on account of such protestations; an absolute determination of essence must be found in every experience, in anything actual just as in every concept. We have already remarked this much earlier on in connection with the *infinite*,[6] which is contradiction as displayed in the sphere of being. But ordinary experience itself testifies that *there do exist* at least *a great many* contradictory things, contradictory dispositions etc., of which the contradiction is present not in any external reflection but right in them. Nor is contradiction to be taken as an abnormality which happens only here and there, but it is rather the negative in its essential determination, the principle of all self-movement which consists in nothing else than in the display of contradiction. External, sensuous motion is itself contradiction's immediate existence. Something moves, not because now it is here and there at another now, but because in one and the same now it is here and not here; because in this here it is and is not at the same time. One must concede to the dialecticians of old the contradictions which they pointed to in motion; but what follows from them is not that motion is not but that it is rather contradiction as *existent*.

Internal self-movement, self-movement proper, *drive* in general (the appetite or nisus of the monad, the entelechy of the absolutely simple essence)[7] is likewise nothing else than that something is, *in itself*, itself and the lack *of itself* (*the negative*), in one and the same respect. Abstract self-identity is not yet vitality; but the positive, since implicitly it is negativity, goes out of itself and sets its alteration in motion. Something is alive, therefore, only to the extent that it contains contradiction within itself: indeed, force is this, to hold and endure contradiction within. If, on the

[6] Cf. above, 21.127, where Hegel refers to contradiction in the transition from the finite to the infinite. But Hegel must here be referring to the 1812 edition of the Logic. Cf. GW 11, 83, 140.

[7] *Monadology*, §§18, 19, 20.

contrary, a concrete existent were not capable of overreaching its positive determination and grasping the negative one at the same time, holding the two firmly together; if it were not capable of harboring contradiction within it, it would not then be a living unity as such, not a ground, and in contradiction it would founder and sink to the ground. – *Speculative thought* consists only in this, in holding firm to contradiction and to itself in the contradiction, but not in the sense that, as it happens in ordinary thought, it would let itself be ruled by it and allow it to dissolve its determinations into just other determinations or into nothing. **11.288**

If to ordinary thought the contradiction which is in motion, in a drive and the like, remains concealed in the *simplicity* of such determinations, contradiction is, on the other hand, immediately displayed in the *determinations of relation*. The most trivial of examples – "above and under," "right and left," "father and son," and so on *ad infinitum* – all contain opposition within one and the same term. "Above" *is* what "under" is *not*; "above" is determined by just this, "not to be under," and *is* only to the extent that an "under" is, and contrariwise. "Father" is the other of "son" and "son" the other of "father," and each is only as this other of the other; and the one determination is at the same time only with reference to the other; their being is *one* subsisting. The father is indeed something for itself outside this reference to the son, but then he is not "father" but a "man" in general. The same applies to "above" and "under," "right" and "left": they too are something outside the reference when reflected into themselves, but just "places" in general. – Opposites entail contradiction inasmuch as, in negatively *referring* to each other, they *sublate each other reciprocally* and are *indifferent* to each other. Ordinary thought, when it passes over to the moment of *indifference*, forgets there the negative unity of the opposites and therefore holds on to them only as "different" in general. And, of course, in this general determination "right" is no longer "right," "left" no longer "left," and so on. But if "right" and "left" are in fact there, present to the thought, then they are present to it in determinations which are self-negating, each negating itself in the other, and yet, in this unity, also not negating itself but each existing indifferently for itself.

Ordinary thought, therefore, does have contradiction everywhere for content but fails to become aware of it; it remains an external reflection that simply shifts from likeness to unlikeness or from the negative reference connecting distinct terms to their immanent reflectedness. It holds these two determinations apart, external to each other, and has *only them* in mind, not the *transition from the one to the other* which is the essential and that which contains the contradiction. – The speculative reflection of *spirit*,

to mention it here, consists on the contrary in grasping and enunciating contradiction. Although it might not express the *concept* of things and their relations and has only representational determinations for its content, it nevertheless connects these in a reference that contains their contradiction and *lets their concept reflectively shine through* the contradiction. – But *thoughtful* reason sharpens, as it were, the blunt difference of diverse terms, the mere manifold of representation, to *essential* distinction, to *opposition*. Only when driven to the extreme of contradiction are the many of that manifold quickened and alive to each other: they hold the negativity in
11.289 them which is the inner pulse of self-movement and life.

We have already remarked concerning the *ontological proof of God's existence* that the determination on which it is based is that of the *sum-total of all realities*.[8] It is customary regarding this determination first to demonstrate that it is *possible* because it entails no *contradiction*, since reality is taken here only as reality without restrictions. We pointed out that this concept, the sum-total of all realities, is thereby reduced to simple, indeterminate being, or, if the realities are in fact taken as severally determinate, to the sum-total of all negations. And if the distinction differentiating them is then taken with greater precision, the difference turns into opposition and consequently into contradiction, and the sum-total of all realities in general into absolute internal contradiction. The usual *horror* which ordinary (not speculative) thought has of contradiction (as nature has of the *vacuum*) rejects this consequence, for it remains at the one-sided consideration that contradiction *resolves* into *nothing* without recognizing its positive side where it becomes *absolute activity* and absolute ground.

The upshot of this examination of the nature of contradiction is that, if a contradiction can be pointed out in something, by itself this is still not, as it were, a blemish, not a defect or failure. On the contrary, every determination, anything concrete, every concept, is essentially a unity of distinguished and distinguishable elements which, by virtue of the *determinate, essential difference*, pass over into elements which are contradictory. This contradictoriness of course resolves itself into nothing: it goes back into its negative unity. A thing, a subject, a concept, is then precisely this negative unity; it is something inherently self-contradictory, but it is no less the *resolved contradiction*; it is the *ground* which contains the determinations it bears. The thing, the subject or the concept, each as reflected into itself within its sphere, is their contradiction as resolved; but the whole sphere of each is in turn *determinate*, *diverse*, and therefore finite, and this

[8] Cf. above, 21.99ff. But Hegel must here be referring to the 1812 edition of the Logic. Cf. GW 11, 64.

means *contradictory*. This sphere is not itself the resolution of its higher contradiction but has yet a higher sphere for its negative unity, for its ground. Finite things, in their indifferent variety, are therefore just this: to be contradictory, *internally fractured and bound to return to their ground*. – As we shall see in due course,[9] the true inference from the finite and accidental to an absolutely necessary being does not consist in inferring the latter from that finite and accidental as a *being which is and remains the ground of the inference*, but from it as a being which is only "falling" [as *accidentality*, from the Latin *cadere*, immediately conveys], *a being inherently self-contradictory*; or rather, the inference consists in demonstrating that accidental being makes in itself its return to its ground and is there **11.290**
sublated – in addition, that in this return to the ground it posits the latter in such a manner that it makes itself rather into a positedness. In customary inference, the *being* of the finite appears to be the ground of the absolute; because the finite *is*, the absolute is. But the truth is that the absolute is because the finite is the immanently self-contradictory opposition, because it *is not*. In the former meaning, the conclusion is that "the *being* of the finite is the being of the absolute"; but in the latter, that "the *non-being* of the finite is the *being* of the absolute."

[9] Cf. below, 11.384ff.

CHAPTER 3

Ground

II.291

Essence determines itself as ground.

Just as *nothing* is at first in simple immediate unity with being, so here too the simple identity of essence is at first in simple unity with its absolute negativity. Essence is only this negativity which is pure reflection. It is this pure reflection as the turning back of being into itself; hence it is *determined*, *in itself* or for us, as the ground into which being resolves itself. But this determinateness is not posited *by the essence itself*; in other words, essence is not ground precisely because it has not itself posited this determinateness that it possesses. Its reflection, however, consists *in positing* itself as what it is *in itself*, as a negative, and in *determining* itself. The positive and the negative constitute the essential determination in which essence is lost in its negation. These self-subsisting determinations of reflection sublate themselves, and the determination that has foundered to the ground is the true determination of essence.

Consequently, *ground* is itself *one of the reflected determinations* of essence, but it is the last, or rather, it is determination determined as sublated determination. In foundering to the ground, the determination of reflection receives its true meaning – that it is the absolute repelling of itself within itself; or again, that the positedness that accrues to essence is such only as sublated, and conversely that only the self-sublating positedness is the positedness of essence. In determining itself as ground, essence determines itself as the not-determined, and only the sublating of its being determined is its determining. – Essence, in thus being determined as self-sublating, does not proceed from an other but is, in its negativity, identical with itself.

Since the advance to the ground is made starting from determination as an immediate first (is done by virtue of the nature of determination itself that founders to the ground through itself), the ground is at first determined by that immediate first. But this determining is, on the one

hand, as the sublating of the determining, the merely restored, purified or manifested identity of essence which the determination of reflection is *in itself*; on the other hand, this negating movement is, as determining, the first positing of that reflective determinateness that appeared as immediate determinateness, but which is posited only by the self-excluding reflection of ground and therein is posited as only something posited or sublated. – Thus essence, in determining itself as ground, proceeds only from itself. As *ground*, therefore, it *posits* itself *as essence*, and its determining consists in just this positing of itself as essence. This positing is the reflection of essence that *sublates* itself in its *determining*; on that side is a *positing*, on this side is *the positing of essence*, hence both in one act.

Reflection is *pure mediation* in general; ground, the *real mediation* of essence with itself. The former, the movement of nothing through nothing back to itself, is the reflective shining *of one* in an *other*; but, because in this reflection opposition does not yet have any self-subsistence, neither is the one, that which shines, something positive, nor is the *other* in which it reflectively shines something negative. Both are substrates, actually of the imagination; they are still not self-referring. Pure mediation is only *pure reference*, without anything being referred to. Determining reflection, for its part, does posit such terms as are identical with themselves; but these are at the same time only *determined references*. Ground, on the contrary, is mediation that is real, since it contains reflection as sublated reflection; it is essence that *turns back into itself through its non-being* and *posits itself*. According to this moment of sublated reflection, what is posited receives the determination of *immediacy*, of an immediate which is self-identical outside its reference or its reflective shining. This immediacy is *being* as restored by essence, the non-being of reflection through which essence mediates itself. Essence returns into itself as it negates; therefore, in its turning back into itself, it gives itself the determinateness that precisely for this reason is the self-identical negative, is sublated positedness, and consequently, as the self-identity of essence as ground, equally an *existent*.

The ground is, *first*, *absolute ground* – one in which the essence is first of all the general *substrate* for the ground-connection. It then further determines itself as *form* and *matter* and gives itself a *content*.

Second, it is *determinate ground*, the ground of a determinate content. Because the ground-connection, in being realized, becomes as such external, it passes over into *conditioning* mediation.

Third, ground presupposes a condition; but the condition equally presupposes the ground; the unconditioned is the unity of the two, *the fact*

itself that, by virtue of the mediation of the conditioning reference, passes
II.293 over into concrete existence.

Remark

Ground, like all the other determinations of reflection, is expressed in a principle: "Everything has a sufficient ground or reason." – In general, this means nothing but this: Anything which *is*, is to be considered *to exist* not as an *immediate*, but as a *posited*; there is no stopping at immediate existence but a return must rather be made from it back into its ground, and in this reflection it is a sublated being and is in and for itself. What is expressed by the principle of sufficient reason is, therefore, the essentiality of immanent reflection as against mere being. – That the *ground or reason* must be sufficient is strictly speaking a totally superfluous addition, for it goes without saying; a thing without sufficient ground would have no ground, yet everything ought to have a ground. But Leibniz, for whom the principle of sufficient reason was especially dear to his heart and even made it the basic principle of his whole philosophy,[10] associated a more profound meaning with "sufficient" than is normally the case when one simply stops at its immediate expression – although, to be sure, even in this ordinary sense the proposition is already to be regarded as important, for it says that being as such, in its immediacy, is an untruth, that it is something essentially posited, and that it is the ground which is rather the true immediate. But Leibniz took the *sufficiency* of the ground above all in opposition to causality taken in its strict sense as mechanical efficiency. Since this mode of efficiency is as such an external activity restricted to a single determinateness according to content, the determinations that it posits come *associated together externally* and *accidentally*; taken one by one, the determinations are comprehended through their causes; but their connection, which constitutes what is essential in a concrete existence, is not to be found in mechanical causes. That connection, the whole as essential unity, is to be found only in the *concept*, in the *purpose*. Mechanical causes are not sufficient for this unity, for they do not have as their ground the purpose which is the unity of the determinations. Accordingly, by "sufficient ground" Leibniz understood one that sufficed also for this unity and comprehended, therefore, not just causes but *final causes*. But this definition of "ground" is at this point still premature; to be a *ground in a teleological sense* is a property of the *concept* and of the mediation effected
II.294 through of it, and this mediation is reason.

[10] *Monadology*, §32.

A. ABSOLUTE GROUND

a. Form and essence

The determination of reflection, inasmuch as this determination returns into ground, is a first immediate existence in general from which the beginning is made. But existence still has only the meaning of positedness and essentially *presupposes* a ground, in the sense that it does not really *posit* a ground; that the positing is a sublating of itself; that it is rather the immediate that is posited, and the ground the non-posited. As we have seen,[11] this presupposing is the positing that rebounds on that which posits; as sublated determinate being, the ground is not an indeterminate but is rather essence determined through itself, but *determined* as *indeterminate* or as sublated positedness. *It is essence that in its negativity is identical with itself.*

The *determinateness* of essence as ground is thus twofold: it is the determinateness of the *ground* and of the *grounded*. It is, *first*, essence as ground, essence *determined* to be essence as against positedness, as *non-positedness*. *Second*, it is that which is grounded, the immediate that, however, is not anything in and for itself: is positedness as positedness. Consequently, this positedness is equally identical with itself, but in an identity which is that of the negative with itself. The self-identical negative and the self-identical positive are *now one and the same identity*. For the ground is the self-identity of the positive or even also of positedness; the grounded is positedness as positedness, but this its reflection-into-itself is the identity of the ground. – This simple identity, therefore, is not itself ground, for the ground is essence *posited* as the non-posited *as against positedness*. As the unity of this determinate identity (the ground) and of the negative identity (the grounded), it is *essence in general* distinct from its *mediation*.

For one thing, this mediation, compared with the preceding reflections from which it derives, is not pure reflection, which is undistinguished from essence and still does not have the negative in it, consequently also does not as yet contain the self-subsistence of the determinations. These have their subsistence, rather, in the ground understood as sublated reflection. – And it is also not the determining reflection whose determinations have essential self-subsistence, for that reflection has foundered, has sunk to the **II.295**
ground, and in the unity of the latter the determinations are only posited

[11] Cf. above, II.252. To be kept in mind is that "presupposing" in German is "*voraussetzen*," i.e. "prepositing." The connection between "presupposing" and "positing" is lost in English, unless one remembers that the Latin root of "supposing," "*ponere*," means the same as the German "*setzen*."

determinations. – This mediation of the ground is thus the unity of pure reflection and determining reflection; their determinations or that which is posited has self-subsistence, and conversely the self-subsistence of the determinations is a posited subsistence. Since this subsistence of the determinations is itself posited or has determinateness, the determinations are consequently distinguished from their simple identity, and they constitute the *form as against* essence.

Essence *has* a form and determinations of this form. Only as ground does it have a fixed immediacy or is *substrate*. Essence as such is one with its reflection, inseparable from its movement. It is not essence, therefore, through which this movement runs its reflective course; nor is essence that from which the movement begins, as from a starting point. It is this circumstance that above all makes the exposition of reflection especially difficult, for strictly speaking one cannot say that *essence* returns into itself, that essence shines in itself, for essence is neither *before* its movement nor *in* the movement: this movement has no substrate on which it runs its course. A term of reference arises in the ground only following upon the moment of sublated reflection. But essence as the referred-to term is determinate essence, and by virtue of this positedness it has form as essence. – The determinations of form, on the contrary, are now determinations *in the essence*; *the latter lies at their foundation* as an indeterminate which in its determination is indifferent to them; in it, they are reflected into themselves. The determinations of reflection should have their subsistence in them and be self-subsistent. But their self-subsistence is their dissolution, which they thus have in an other; but this dissolution is itself this self-identity or the ground of the subsistence that they give to themselves.

Everything *determinate* belongs in general to form; it is a form determination inasmuch as it is something posited and hence distinguished from *that of which it is the form*. As *quality*, determinateness is one with its substrate, being; being is the immediate determinate, not yet distinct from its determinateness or, in this determinateness, still unreflected into itself, just as the determinateness is, therefore, an existent determinateness, not yet one that is posited. – Moreover, the form determinations of essence are, in their more specific determinateness, the previously considered moments of reflections:[12] *identity* and *difference*, the latter as both diversity and *opposition*. But also the *ground-connection* belongs among these form determinations of essence, because through it, though itself the sublated determination of reflection, essence is at the same time as posited.

[12] Cf above, 11.258–290.

By contrast, the identity that has the ground immanent in it does not pertain to form, because positedness, as sublated and as such (as ground and grounded), is *one* reflection, and this reflection constitutes essence as *simple substrate* which is the *subsistence* of form. But in ground this subsistence is *posited*, or this essence is itself essentially as determinate and, consequently, is in turn also the moment of the ground-connection and form. – This is **11.296** the absolute reciprocal connecting reference of form and essence: essence is the simple unity of ground and grounded but, in this unity, is itself determined, or is a negative, and it distinguishes itself as substrate from form, but at the same time it thereby becomes itself ground and moment of form.

Form is therefore the completed whole of reflection; it also contains this determination of reflection, that it is sublated; just like reflection, therefore, it is one unity of its determining, and it is also *referred* to its sublatedness, *to another* that is not itself form but *in which* the form is. As *essential* self-referring negativity, in contrast with that simple negative, form is *positing* and *determining*; simple essence, on the contrary, is indeterminate and *inert* substrate in which the determinations of form have their subsistence or their reflection into themselves. – External reflection normally halts at this distinction of essence and form; the distinction is necessary, but the distinguishing itself of the two is their unity, just as this unity of ground is essence repelling itself from itself and making itself into positedness. Form is absolute negativity itself or the negative absolute self-identity by virtue of which essence is indeed not being but essence. This identity, taken abstractly, is essence as against form, just as negativity, taken abstractly as positedness, is the one determination of form. But this determination has shown itself to be in truth the whole self-referring negativity which within, as this identity, thus is simple essence. Consequently, form has essence in its own identity, just as essence has absolute form in its negative nature. One cannot therefore ask, *how form comes to essence*, for form is only the internal reflective shining of essence, its own reflection inhabiting it. Form equally is, within it, the reflection turning back into itself or the identical essence; in its determining, form makes the determination into positedness as positedness. – Form, therefore, does not determine essence, as if it were truly presupposed, separate from essence, for it would then be the unessential, constantly foundering determination of reflection; here it rather is itself the ground of its sublating or the identical reference of its determinations. That the form determines the essence means, therefore, that in its distinguishing form sublates this very distinguishing and is the self-identity that essence is as the subsistence of the determinations; form

is the contradiction of being sublated in its positedness and yet having subsistence in this sublatedness; it is accordingly ground as essence which
II.297 is self-identical in being determined or negated.

These distinctions, of form and of essence, are therefore only *moments* of the simple reference of form itself. But they must be examined and fixed more closely. Determining form refers itself to itself as sublated positedness; it thereby refers itself to its identity as to another. It posits itself as sublated; it therefore *pre*-supposes its identity; according to this moment, essence is the indeterminate to which form is an other. It is not the essence which is absolute reflection within, but essence determined as formless identity: it is *matter*.

b. Form and matter

Essence becomes matter in that its reflection is determined as relating itself to essence as to the formless indeterminate. Matter, therefore, is the simple identity, void of distinction, that essence is, with the determination that it is the other of form. Hence it is the proper *base* or substrate of form, since it constitutes the immanent reflection of the determinations of form, or the self-subsistent term, to which such determinations refer as to their positive subsistence.

If abstraction is made from every determination, from every form of a something, matter is what is left over. Matter is the absolutely *abstract*. (One cannot see, feel, etc. matter; what one sees or feels is a *determinate matter*, that is, a unity of matter and form.) This abstraction from which matter derives is not, however, an *external* removal and sublation of form; it is rather the form itself which, as we have just seen, reduces itself by virtue of itself to this simple identity.

Further, form *presupposes* a matter to which it refers. But for this reason the two do not *find* themselves confronting each other externally and accidentally; neither matter nor form derives from itself, is *a se*, or, in other words, is *eternal*. Matter is indifferent with respect to form, but this indifference is the *determinateness* of self-identity to which form returns as to its substrate. Form pre-*supposes* matter for the very reason that it posits itself as a sublated, hence refers to this, its identity, as to something other. Contrariwise, form is presupposed by matter; for matter is not simple essence, which immediately is itself absolute reflection, but is essence determined as something positive, that is to say, which only is as sublated
II.298 negation. – But, on the other hand, since form posits itself as matter only in sublating itself, hence in *presupposing* matter, matter is also determined as

groundless subsistence. Equally so, matter is not determined as the ground of form; but rather, inasmuch as matter posits itself as the abstract identity of the sublated determination of form, it is not that identity as ground, and form is therefore groundless with respect to it. Form and matter are consequently alike determined as not to be posited each by the other, each not to be the ground of the other. Matter is rather the identity of the ground and the grounded, as the substrate that stands over against this reference of form. This determination of indifference that the two have in common is the determination of matter as such and also constitutes their reciprocal reference. The determination of form, that it is the connection of the two as distinct, equally is also the other moment of the relating of the two to each other. – Matter, determined as indifferent, is the *passive* as contrasted to form, which is determined as the *active*. This latter, as self-referring negative, is inherently contradiction, self-dissolving, self-repelling, and self-determining. It refers to matter, and it is *posited* to refer to this matter, which is its subsistence, as to another. Matter is posited, on the contrary, as referring only to itself and as indifferent to the other; but, *implicitly*, it does refer to the form, for it contains the sublated negativity and is matter only by virtue of this determination. It refers to it as an *other* only because form is not posited in it, because it is form only *implicitly*. It contains form locked up inside it, and it is an absolute receptivity for form only because it has the latter within it absolutely, because to be form is its implicit vocation.[13] *Hence matter must be informed*, and *form* must *materialize* itself; it must give itself self-identity or subsistence in matter.

2. Consequently, form determines matter, and matter is determined by form. – Because form is itself absolute self-identity and hence implicitly contains matter; and equally because matter in its pure abstraction or absolute negativity possesses form within it, the activity of the form on the matter and the reception by the latter of the form determination is only *the sublating of the semblance of their indifference* and distinctness. Thus the determination referring each to the other is the self-mediation of each through its own non-being. But the two mediations are *one* movement, and the restoration of their original identity is the inner recollection[14] of their exteriorization.

First, form and matter *pre*-suppose each other. As we have seen,[15] this only means that the *one* essential unity is negative self-reference, and that it therefore splits, determined as an indifferent substrate in the essential

[13] *ihre an sich seyende Bestimmung*. "*Bestimmung*" conveys here its other meaning of "vocation."
[14] "inner recollection" = *Erinnerung*. [15] Cf. above, 11.296, 297.

11.299 identity, and as determining form in essential distinction or negativity. That unity of essence and form, the two opposed to each other as form and matter, is the *absolute* self-*determining ground*. Inasmuch as this unity differentiates itself, the reference connecting the two diverse terms, because of the unity that underlies them, becomes a reference of reciprocal presupposition.

Second, the form already is, as self-subsisting, self-sublating contradiction; but it is also posited as in this way self-sublating, for it is self-subsisting and at the same time essentially referred to another, and consequently it sublates itself. Since it is itself two-sided, its sublating also has two sides. *For one*, form sublates *its self-subsistence* and transforms itself into something *posited*, something that exists in an other, and this other is in its case matter. *For the other*, form sublates its determinateness *vis-à-vis* matter, sublates its reference to it, consequently its *positedness*, and it thereby gives itself *subsistence*. Its reflection in thus sublating its positedness is its own identity into which it passes over. But since form at the same time externalizes this identity and posits it over against itself as matter, that reflection of the positedness into itself is a union with a matter in which it obtains subsistence. In this union, therefore, it is equally both: is united with matter *as with something other* (in accordance with the first side, viz. in that it makes itself into a positedness), and, in this other, is united *with its own identity*.

The activity of form by which matter is determined consists, therefore, in a negative relating of the form to itself. But, conversely, form thereby negatively relates itself to matter also; the movement, however, by which matter becomes determined is just as much the form's own movement. Form is free of matter, but it sublates its self-subsistence; but this, its self-subsistence, is matter itself, for it is in this matter that it has its essential identity. It makes itself into a positedness, but this is one and the same as making matter into something determinate. – But, considered from the other side, the form's own identity is at the same time externalized, and matter is its other; for this reason, because form sublates its own self-subsistence, matter is also not determined. But matter only subsists *vis-à-vis* form; as the negative sublates itself, so does the positive also. And as the form sublates itself, the determinateness of matter that the latter has *vis-à-vis* form also falls away – the determinateness, namely, of being the indeterminate subsistence.

What appears here as the *activity of form* is, moreover, just as much the *movement that belongs to matter* itself. The determination that *implicitly exists* in matter, what matter is supposed to be, is its absolute negativity. Through it matter does not just refer to form simply as to an other, but this

external other is the form rather that matter itself contains locked up within itself. Matter is in itself the same contradiction that form contains, and this **11.300** contradiction, like its resolution, is only *one*. But matter is thus in itself self-contradictory because, as indeterminate self-identity, it is at the same time absolute negativity; it sublates itself within: its identity disintegrates in its negativity while the latter obtains in it its subsistence. Since matter is therefore determined by form as by something external, it thereby attains its determination, and the externality of the relating, for both form and matter, consists in that each, or rather in that the original unity of each, in positing is at the same time *presupposing*: the result is that self-reference is at the same time a reference to the self as sublated or is reference to its other.

Third, through this movement of form and matter, the original unity of the two is, on the one hand, restored; on the other hand, it is henceforth a *posited* unity. Matter is just as much a self-determining as this determining is for it an activity of form external to it; contrariwise, form determines only itself, or has the matter that it determines within it, just much as in its determining it relates itself to another; and both, the activity of form and the movement of matter, are one and the same thing, only that the former is an activity, that is, it is the negativity as posited, while the latter is movement or becoming, the negativity as determination *existing in itself*. The result, therefore, is the unity of the in-itself and positedness. Matter is as such determined or necessarily has a form, and form is simply material, subsistent form.

Inasmuch as form presupposes a matter as its other, it is *finite*. It is not a ground but only the active factor. Equally so, matter, inasmuch as it presupposes form as its non-being, is *finite* matter; it is not the ground of its unity with form but is for the latter only the substrate. But neither this finite matter nor the finite form have any truth; each refers to the other, or only their unity is their truth. The two determinations return to this unity and there they sublate their self-subsistence; the unity thereby proves to be their ground. Consequently, matter is the ground of its form determination not as matter but only inasmuch as it is the absolute unity of essence and form; similarly, form is the ground of the subsistence of its determinations only to the extent that it is that same one unity. But this one unity, as absolute negativity, and more specifically as exclusive unity, is, in its reflection, a presupposing; or again, that unity is *one* act, of preserving itself as positedness in positing, and of repelling itself from itself; of referring itself to itself as itself and to itself as to another. Or, the act by which matter is determined by form is the self-mediation of

essence as ground, in one unity: through itself and through the negation of
11.301 itself.

Informed matter or form that possesses subsistence is now, not only this absolute unity of ground with itself, but also unity as *posited*. The movement just considered is the one in which the absolute ground has exhibited its moments at once as self-sublating and consequently as posited. Or the restored unity, in withdrawing into itself, has repelled itself from itself and has determined itself; for its unity has been established through negation and is, therefore, also negative unity. It is, therefore, the unity of form and matter, as the substrate of both, but a substrate which is *determinate*: it is formed matter, but matter at the same time indifferent to form and matter, indifferent to them because sublated and unessential. This is *content*.

c. Form and content

Form stands at first over against essence; it is then the ground-connection in general, and its determinations are the ground and the grounded. It then stands over against matter, and so it is determining reflection, and its determinations are the determination of reflection itself and the subsistence of the latter. Finally, it stands over against content, and then its determinations are again itself and matter. What was previously the self-identical – at first the ground, then subsistence in general, and finally matter – now passes under the dominion of form and is once more one of its determinations.

Content has, *first*, a form and a matter that belong to it essentially; it is their unity. But, because this unity is at the same time *determinate* or *posited* unity, content stands over against form; the latter constitutes the *positedness* and is the unessential over against content. The latter is therefore indifferent towards form; form embraces both the form as such as well as the matter, and content therefore has a form and a matter, of which it constitutes the substrate and which are to it mere positedness.

Content is, *second*, what is identical in form and matter, so that these would be only indifferent external determinations. They are positedness in general, but a positedness that has returned in the content to its unity or its ground. The identity of the content with itself is, therefore, in one respect that identity which is indifferent to form, but in another the identity *of ground*. The ground has at first disappeared into content; but content is at the same time the negative reflection of the form determinations into themselves; its unity, at first only the unity indifferent to form, is therefore also the formal unity or the ground-connection as such. Content, therefore,

has this ground-connection as its *essential* form, and, contrariwise, the *ground* has a *content*. **11.302**

The content of the ground is therefore the ground that has returned into its unity with itself; the ground is at first the essence that in its positedness is identical with itself; as diverse from and indifferent to its positedness, the ground is indeterminate matter; but as content it is at the same time informed identity, and this form becomes for this reason a ground-connection, since the determinations of its oppositions are posited in the content also as negated. – Content is further *determined* within, not like matter as an indifferent in general, but like informed matter, so that the determinations of form have a material, indifferent subsistence. On the one hand, content is the essential self-identity of the ground in its positedness; on the other hand, it is posited identity as against the ground-connection; this positedness, which is in this identity as determination of form, stands over against the free positedness, that is to say, over against the form as the whole connection of ground and grounded. This form is the total positedness returning into itself; the other form, therefore, is only the positedness as immediate, the *determinateness* as such.

The ground has thus made itself into a determinate ground in general, and the determinateness is itself twofold: of form first, and of content second. The former is its determinateness of being external to the content as such, the content that remains indifferent to this external reference. The latter is the determinateness of the content that the ground has.

B. DETERMINATE GROUND

a. Formal ground

The ground has a determinate content. For the form, as we have seen,[16] the determinateness of content is the *substrate*, the simple *immediate* as against *the mediation* of form. The ground is negatively self-referring identity which, for this reason, makes itself into a *positedness*; it negatively refers to *itself* because in its negativity it is identical with itself; this identity is the substrate or the content which thus constitutes the indifferent or positive unity of the ground-connection and, in this connection, is the *mediating factor*.

In this content, the determinateness that the ground and the grounded have over against one another has at first disappeared. The mediation,

[16] Cf. just above, 11.301.

however, is also *negative* unity. The negative implicit in that indifferent
11.303 substrate is this substrate's *immediate determinateness* through which the ground has a determinate content. But then, the negative is the negative reference of form to itself. What has been posited sublates itself on its side and returns to its ground; the ground, however, the essential self-subsistence, refers negatively to itself and makes itself into a positedness. This negative mediation of ground and grounded is the mediation that belongs to form as such, *formal mediation*. Now both sides of form, because each passes over into the other, thereby mutually posit themselves *into one identity* as sublated; in this, they *pre*-suppose the identity. The latter is the determinate content to which the formal mediation thus refers itself through itself as to the positive mediating factor. That content is the identical element of both, and because the two are distinct, yet in their distinction each is the reference to the other, it is their subsistence, the subsistence *of each as the whole* itself.

Accordingly, the result is that in the determinate ground we have the following. *First*, a determinate *content* is considered from *two sides*, once in so far as it is *ground*, then again in so far as it is *grounded*. The content itself is indifferent to these forms; it is in each simply and solely *one* determination. *Second*, the ground is itself just as much a moment of form as what is posited by it; this is its *identity according to form*. It is a matter of indifference which of the two determinations is made the first, whether the transition is from the one as posited to the other as ground or from the one as ground to the other as posited. The grounded, considered for itself, is the sublating of itself; it thereby makes itself on the one side into a posited, and is at the same time the positing of the ground. The same movement is the ground as such; it makes itself into something posited, and thereby becomes the ground of something, that is to say, is present therein both as a posited and also first as ground. That there be a ground, of that the posited is the ground, and, conversely, the ground is thereby the posited. The mediation begins just as much from the one as from the other; each side is just as much ground as posited, and each is the whole mediation or the whole form. – Further, this whole form is itself, as self-identical, the *substrate* of the two determinations that constitute the two sides of the ground and the grounded; form and content are thus themselves one and the same identity.

Because of this identity of the ground and the grounded, according both to content and form, the ground is *sufficient* (the sufficiency being limited to this relation); *there is nothing in the grounded which is not in the ground*. Whenever one asks for a ground, one expects to see *the same* determination

which is the *content doubled*, once in the form of that which is posited, and again in the form of existence reflected into itself, of essentiality. **11.304**

Now inasmuch as in the determined ground, the ground and the grounded are each the whole form, and their content, though determinate, is nevertheless one and the same, the two sides of the ground do not as yet have a real determination, do not have a different content; the determinateness is only one simple determinateness that has yet to pass over into the two sides; the determinate ground is present only in its pure form, as *formal* ground. – Because the content is only this simple determinateness, one that does not have in it the form of the ground-connection, the determinateness is a self-identical content indifferent to form, and the form is external to it; the content is other than the form.

Remark

When the search for determinate grounds does not go past the form of ground as we have just developed, then the assigning of a ground remains a mere formalism, the empty tautology of repeating in the form of immanent reflection, of essentiality, the same content already present in the form of immediate existence considered as posited. This exercise of assigning grounds is for this reason just as empty as any discourse only governed by the principle of identity. The sciences, especially the physical sciences, are full of tautologies of this kind which apparently constitute the prerogative of science. – For instance, the ground for the planets moving around the sun is given to be the reciprocal *attractive force* of the sun and the earth. So far as content goes, this says no more than what is contained in the phenomenon, namely that the movements of the two bodies are correlated, except that it is expressed in the form of a determination reflected into itself, that of force. If it is asked what kind of force this attractive force might be, the answer is that it is the force that makes the earth move around the sun, that is to say, it has exactly the same content as the existence for which it is supposed to be the ground; the connection of the earth and sun with respect to motion is the identical substrate of ground and grounded. – When a form of crystallization is explained in this way, namely that it is grounded in the particular arrangement into which the molecules enter with one another, the actual crystallization is this arrangement itself, except expressed as ground. These etiologies, which are the privilege of the sciences, are valued in ordinary life for what they are – tautological, empty talk. If to the question why does this man travel to the city, one were to give as ground that there is in the city an attractive force impelling him to it, **11.305** this kind of answer would be deemed brainless – yet it is the kind of answer

which is sanctioned in the sciences. – Leibniz accused Newton's force of attraction of being precisely the kind of occult quality that the Scholastics used for the purpose of explanation.[17] One should rather accuse it of being the opposite of occult, that it is *all too known* a quality, for it has no other content than the phenomenon itself. – What recommends this manner of explanation is its great clarity and easy comprehension, for there is nothing clearer and more open to comprehension than that a plant, for instance, has its ground in a vegetative, that is, plant-producing, force. – Such a force may be called an *occult* quality only in the sense that a ground ought to have *another content* than what is to be explained; but no such content is given, and in that sense, of course, the force appealed to for explanation is a hidden ground, the required but *not* given ground. Something is no more explained by this formalism than is the nature of a plant known when I say that it is a plant; for all the clarity of the statement, or of the claim that the plant has its ground in a plant-producing force, and just because of that clarity, one can indeed call this a very *occult* manner of explanation.

Secondly, *as regards form*, in this kind of explanation the two *opposite directions* of the ground-connection are adduced without being apprehended in their determinate relation. On the one hand, the ground is ground as the immanently reflected content determination of the existence which it grounds; on the other hand, it is that which is posited. It is that on the basis of which that existence is supposed to be understood; but, *conversely*, *it is inferred from the latter* and is understood from it. The main business of this reflection thus consists in gleaning the ground from an existence, that is, in converting the immediate existence into the form of reflected being; consequently the ground, instead of being self-subsisting in and for itself, is rather that which is posited and derived. And since on this procedure the ground is arranged to fit the phenomenon, and its determinations depend on the latter, the phenomenon unhindered flows smoothly out of the ground with full wind in its sails. But in this way, knowledge has not advanced an inch; it runs in circles, making formal distinctions which the procedure itself overturns and sublates. One of the main difficulties in making progress in the study of the sciences in which this procedure is the rule is due precisely to this wrongheaded procedure, of premising as ground that which is in fact derived, and in fact producing in what follows, once one gets there, the ground of this previously

[17] *Godfredi Gulielmi Leibnitii Opera Omnia, Tomus Secundus in duas Partes, Pars Altera: Physica Generalis, Chymia, Medicina, Botanica, Historia Naturalis*, ed. L. Duten (Geneva, 1768), Epistola III (Letter to J. G. Liebnecht), p. 95: "I consider such an attractive force to be either a miracle or no more than a scholastic occult quality."

supposed ground. The exposition begins with grounds that are floated as principles and original concepts. They are simple determinations lacking **11.306** necessity in and for themselves; what follows is supposed to be based on them. Therefore, anyone who would penetrate such sciences must begin by assimilating these grounds, and this is a business that reason finds unsavory, for it requires accepting as groundwork what is in fact groundless. More conducive to progress is to accept such principles as *given* without much reflection, and then to use them as fundamental rules of one's understanding. Without this method, one cannot make a start; nor without it can one make any advance. But the advance is hindered the moment the method shows its hand by reversing itself, and looks for the derived in the consequent when in fact it is the derived that alone contains the grounds of the above presuppositions. Further, because the consequent proves to be the phenomenon from which the ground was derived, this relation into which the phenomenon is cast raises suspicion about the way it is presented, for the phenomenon is not in fact expressed in the immediacy of a phenomenon but as evidence for the ground. But because the latter, though the ground, is derived from the phenomenon, all the more so would one wish to see the phenomenon in its immediacy in order to be able to pass judgment on how the ground is derived from it. In an exposition of this kind, where the true ground comes out as the derived, one never knows what to make of either the ground or the phenomenon. And the uncertainty grows – particularly when the procedure is not rigorously consistent but is more *honest* – when the phenomenon betrays traces and circumstances that point to other things, and often entirely different things, than are contained in the principles alone. Lastly, the confusion grows even greater when hypothetical determinations that are the product of reflection are blended with the immediate determinations of the phenomenon itself, and are then spoken of as if they belonged to immediate experience. Many who come to these sciences in good faith may well believe, from the way in which these things are spoken of in them as immediate determinations of existence, that molecules, empty interstices, centrifugal force, ether, the separate ray of light, electrical and magnetic *matter*, and an assortment of other like things or relations, are actually to be found *in perception*. They serve as first grounds for other things; they are spoken of, and deliberately made use of, as actual things; in good faith one accepts them as such, before one realizes that they are determinations inferred from that which they are supposed to ground, hypotheses and fictions derived by an uncritical reflection. In fact one finds oneself in a kind of witches' circle in which determinations of existence and determinations of reflection, ground and grounded,

11.307 phenomena and phantoms, mix in promiscuous company enjoying equal rank in common.

Along with the formal business of this method of explaining from grounds, one also hears it repeatedly said – in spite of all the explaining done on the basis of well-known forces and matters – that we *do not know the inner essence* of these same forces and matters. This can only be seen as an admission that this method of explaining from grounds does not satisfy its own expectations, that it itself demands something quite different from such grounds. But it is then difficult to see why so much effort goes into that explaining; why that different something is not sought for, or at least why the explaining is not set aside and the facts are not taken as they simply stand.

b. Real ground

The determinateness of ground is, as we have seen, on the one hand determinateness of the *substrate* or content determination; on the other hand, it is the otherness in the ground-connection itself, namely the distinctness of its content and the form; the connection of ground and grounded strays in the content as an external form, and the content is indifferent to these determinations. – But in fact the two are not external to each other; for this is what the content is: to be the *identity* of the *ground* with itself in the *grounded*, and of the *grounded* in the *ground*. The side of the ground has shown itself to be itself a posited, and the side of the grounded to be itself ground; each side is this identity of the whole within it. But since they equally belong to form and constitute its determinate difference, each is *in its determinateness* the identity of the whole with itself. Consequently, each has a *diverse content* as against the other. – Or, considering the matter from the side of the content, since the latter is the self-identity of the ground-connection, it essentially possesses this difference of form within, and is as ground something other than what it is as grounded.

Now the moment ground and grounded have a diverse content, the ground-connection has ceased to be a formal one; the turning back to the ground and the procession forward from ground to posited is no longer a tautology; the *ground* is realized. Henceforth, whenever we ask for a ground, we actually demand another content determination for it than the determination of the content whose ground we are asking for.

This connection now determines itself further. For inasmuch as its two sides are of different content, they are indifferent to each other; each is an immediate, self-identical determination. Moreover, as referred to each

other as ground and grounded, the ground reflects itself in the other, as **11.308**
in something posited by it, back to itself; the content on the side of the ground, therefore, is equally in the grounded; the latter, as the posited, has its self-identity and subsistence only in the ground. But besides this content of the ground, the grounded also now possesses a content of its own and is accordingly the *unity* of a *twofold* content. Now this unity, as the unity of sides that are different, is indeed their negative unity; but since the two determinations of content are indifferent to each other, that unity is only their empty reference to each other, in itself void of content, and not their mediation; it is a *one* or *a something* externally holding them together.

In the real grounding connection there is present, therefore, a twofold. *For one thing*, the content determination which is ground extends continuously[18] into the positedness, so that it constitutes the simple identity of the ground and the grounded; the grounded thus contains the ground fully within itself; their connection is one of undifferentiated essential compactness. Anything else in the grounded added to this simple *essence* is, therefore, only an unessential form, external determinations of the content that, as such, are free from the ground and constitute an immediate manifold. Of this unessential more, therefore, the essential is not the ground, nor is it the ground of any *connection* between it and the unessential in the grounded. The unessential is a positively identical element that resides in the grounded but does not posit itself there in any distinctive form; as self-referring content, it is rather an indifferent positive *substrate*. – *For another thing*, that which in the something is linked with this substrate is an indifferent content, but as the unessential side. The main thing is the *connection of* the substrate and the unessential manifold. But this connection, since the determinations that it connects are an indifferent content, is also *not a ground*; true, one determination is determined as essential content and the other as only unessential or as posited; but this form is to each, as a self-referring content, an external one. The *one of the something* that constitutes their connection is for this reason not a reference of form, but only an external tie that does not hold the unessential manifold content as *posited*; it too is therefore likewise only a *substrate*.

Ground, in determining itself as real, because of the diversity of the content that constitutes its reality, thus breaks down into external determinations. The two connections of the essential reality – content, as the simple *immediate identity* of ground and grounded; and then *the something* connecting distinct contents – are *two different substrates*. The

[18] "extends continuously" = *mit sich selbst kontinuirt*.

self-identical form of ground, according to which one and the same thing is at one time the essential and at another the posited, has vanished. The ground-connection has thus become *external* to itself.

Consequently, it is an external ground that now holds together a diversi-
11.309 fied content and determines what is ground and what is posited by it; this determination is not to be found in the two-sided content itself. The real ground is therefore the *reference to another*, on the one hand, of a content to another content and, on the other, of the ground-connection itself (the form) to another, namely to an *immediate*, to something not posited by it.

Remark

The formal ground-connection has only *one* content for the ground and the grounded; its necessity rests on this identity, but so does its tautological nature. The real ground has a diversified content; with this content, however, there also comes the contingency and the externality of the ground-connection. On the one hand, that which is considered as essential, and therefore as the ground determination, is not the ground of other determinations that are linked to it. On the other hand, it is also undetermined which of the several content determinations of a concrete thing should be taken as the essential and as ground; the choice between them is free. For instance, as regards the first point, the ground of a house is its foundation; this is so because of the *gravity* which is inherent in sensuous matter, and this gravity is perfectly identical in both the ground of the house and the grounded house. Now, that there is in heavy matter a distinction as that of a foundation and a modification of it distinct from it through which it constitutes a habitation, this is to gravity itself totally indifferent; the reference connecting it to the other content determinations, the purpose, the furnishings of the house, etc., is external to it; gravity, therefore, though it is the common substrate of the determinations constituting the house, is not the ground of it as house. Accordingly, gravity is just as much the ground for a house standing up as for a stone falling down. The stone has this ground, gravity, in itself; but the fact that it has a further content determination by which it is not just something heavy but a stone, this is external to gravity. And one must look elsewhere than in gravity for the cause that removed the stone from the ground on which it then falls; similarly the time and space of the fall and their correlation, the motion of falling, are of another content than gravity and can be conceived of without it (as is commonly said), and therefore are not essentially posited by it. – Gravity is equally the ground that makes the upward trajectory of a projectile the opposite counterpart of the falling trajectory. – It is clear from the diversity

of the determinations for which gravity is the ground, that something else is required that will make it the ground of this determination or that. –

When it is said of *nature* that it is the *ground of the world*, then what is called nature is, on the one hand, *one* with the world and the world nothing but nature itself. On the other hand, the two are also different, nature being rather the indeterminate, or at least determinate only as the essence of the world, self-identical in the universal differences that are laws; **11.310** to be a world, a manifold of determinations is still to be externally added to it. But these determinations do not have their ground in nature as such, which is rather indifferent with respect to them as accidentalities. – We have the same relation when *God* is defined as the *ground of nature*. As ground, he is the essence of nature; nature contains him within it and is identical with him; but nature has yet another manifold which is distinct from the ground itself; this manifold is a *third* in which these two diverse sides, God and nature, are linked together; the side of the ground is neither the ground of this manifold, which is different from him, nor of his link with it. There is, therefore, no cognition of nature to be had from God as the ground, for God would then be only nature's universal essence and, as such, would not contain it in its determinate essence or as nature.

Because of the diversity of content between the ground or, more appropriately, the substrate, and that which in the grounded is linked to it, the assigning of real grounds is no less of a formalism than is the formal ground itself. In the latter, the self-identical content is indifferent to form, and the same applies to the real ground. In its case, it further follows that the real ground does not have specifically within it the wherewithal for determining which in a manifold of determinations is to be taken as the essential. *Something* is a *concrete something*; its manifold determinations are to all appearances equally stable and permanent in it. Any of them, therefore, can be taken as ground no less than any other, that is to say, can be taken as the *essential* determination, and in comparison to it the others would then be only something posited. We go back here to what we noted earlier, namely that from the fact that a determination is deemed in one case to be the ground of another, it does not follow that this other is posited with it in another case or at all. – *Punishment*, for instance, has a variety of determinations: that it is retribution; and also a deterrent example, a deterring threat made by the law; and also a contribution to the self-awareness and betterment of the culprit. Each of these different determinations has been regarded as the *ground of punishment*, on the ground that it is the essential determination, and by default the others, since they are different from it, have been regarded as only accidental. But the one determination

which is assumed as ground does not amount to the whole punishment; the latter, as something concrete, also contains all of the rest, and in it these are only linked to the first without having their ground in it. – Or again a *civil servant* has a talent for his office, as an individual has family relations, has a number of acquaintances, a particular character, was called upon to prove himself under such and such circumstances and on such and such occasions, etc. Now each of these properties can be, or can be regarded to be, the ground of his being a civil servant; they are a diversified
11.311 content held together in a third; the form, in which they are determined relatively to each other as essential and posited, is external to this content. To the civil servant each of the properties is essential, for it is by virtue of them that he is the determinate individual that he is; since his office can be regarded as a determination externally posited in him, each of the rest can be determined as a ground with respect to it, but conversely, they too can be regarded as posited and the office as their ground. How they relate *actually*, that is, in this singular case, is a determination external to the grounding connection and to the content itself; it is a third that confers on them the form of ground and grounded.

So in general every existence can have several grounds; each of its content determinations pervades the concrete whole while retaining its identity, and thus allows the possibility that it be regarded as essential; because of the contingency of the link connecting them, the door is left wide open to a multitude of *points of view*, that is, determinations that lie *outside* the fact itself. – Whether a ground has this or that *consequence* is therefore equally accidental. For instance, moral motives are *essential determinations* of ethical nature, but what follows from them is at the same time an externality distinct from them, one that may or may not follow from them but is attached to them only by virtue of a third factor. Or to be more precise, *if* the moral determination is a ground, it is *not* accidental to it that it should have a consequence or that something be grounded by it; but that it should be made into a ground in the first place, *that* is accidental. But again, since the content which is its consequence has the nature of externality when the determination is made into a ground, it can be immediately sublated by some other externality. From a moral motive, therefore, an action can proceed but can also not proceed. Conversely, an action can have several grounds; as something concrete, it contains a manifold of essential determinations, each of which can therefore be offered as the ground. The search and the assigning of grounds which is the special domain of *argumentation* is for this reason an endless meandering without final destination; for each and every thing good grounds can be adduced,

but so they can for its opposite just as well, and there can be a great many grounds with nothing following from them. What Socrates and Plato call *sophistry* is nothing else than argumentation from grounds; Plato opposed to it the examination of the idea, that is, of a fact in and for itself or in its *concept*.[19] Grounds are taken only from *essential* determinations of content, relations and points of view, of which each fact and also its opposite can have several; in their form of essentiality, each is just as valid as the next; each is a one-sided ground, because none contains the whole compass of the fact for which other particular sides then provide other particular **11.312** grounds, and none exhausts the fact that *links* them together and contains them all; none is the *sufficient* ground or reason, that is, the concept.

c. Complete ground

1. In real ground, ground as content and ground as connection are only *substrates*. The former is only *posited* as essential and as ground; the connection is *what* the grounded *immediately* is as the indeterminate substrate of a diversified content, a linking of this content which is not the content's own reflection but is rather external and consequently a reflection which is only posited. The real ground-connection is ground, therefore, rather as sublated; consequently, it rather makes up the side of the *grounded* or of the *positedness*. As positedness, however, the ground itself has now returned to its ground; it is now something grounded: it has *another ground*. This ground will therefore be so determined that, *first*, it is *identical* with the ground by which it is grounded; both sides have in this determination one and the same content; the two content determinations and their linkage in a something are equally to be found in the new ground. But, *second*, the new ground into which the previously merely posited and external link is now sublated is the immanent reflection of this link: the *absolute reference* of the two content determinations to each other.

Because real ground has itself thus returned to its ground, the identity of ground and grounded or the formality of ground reasserts itself in it. The newly arisen ground-connection is therefore the one which is *complete*, which contains the formal and real ground in itself at the same time and mediates the content determinations which in the real ground confronted each other immediately.

2. Thus the ground-connection has more precisely determined itself as follows. *First*, something has a ground; it contains *the content determination*

[19] *The Sophist*, 259c–e.

which is the *ground* and, in addition, a *second* determination as *posited* by the ground. But, because of the indifference of content, the one determination is not ground in itself, nor is the other in itself one that is grounded by the first; this *connection of ground and grounded* is rather sublated in the immediacy of their content, is posited, and as such has its ground in *another* such connection. Since this second connection is distinguished only according to form, it has the same content as the first; it still has the same two determinations of content but is now their *immediate* linking together. This linking, however, is of a general nature, and the content, therefore, is diversified into determinations that are indifferent to each other. The linking is not, therefore, their true absolute connection that would make one determination the element of self-identity in the positedness, and the other determination the positedness of this same self-identity; on the contrary, the two are supported by a something and this something
11.313 is what connects them, but in a connection which is not reflected, is rather only immediate and, therefore, only a relative ground as against the linking in the other something. The *two somethings* are therefore the two distinct connections of content that have transpired. They stand in the identical ground-connection of form; they are one and the same *whole content*, namely the two content determinations and their connection; they are distinct only by the kind of this connection, which in the one is an immediate and in the other a posited connection; through this, they are distinguished one from another as ground and grounded only *according to form*. – *Second*, this ground-connection is not only formal, but also real. Formal ground passes over into real ground, as has been shown; the moments of the form reflect themselves into themselves; they are a self-subsistent content, and the ground-connection contains also one content with the character of *ground* and *another* with that of *grounded*. The content constitutes at first the *immediate* identity of both sides of the formal ground; so the two sides have one and the same content. But the content also has the form in it, and so it is a twofold *content* that behaves as ground and grounded. One of the two content determinations of the two somethings is therefore determined, not merely as being common to them according to external comparison, but as their identical substrate and the foundation of their connection. As against the other determination of the content, this determination is essential and is the ground of the other which is posited, that is, posited in the something, the connection of which is the grounded. In the first something, which is the ground-connection, this second determination of the content is also immediately and *in itself* linked with the first. But the other something only contains the one determination *in itself* as that in

which it is immediately identical with the first something, but the other as the one which is posited in it. The former content determination is its ground by virtue of its being *originally* linked in the first something with the other content determination.

The *ground-connection* of the content determinations in the second something is thus *mediated* through the connection present in the first something. The inference is this: since determination *B* is implicitly linked with determination *A* in a something, in a second something to which only the one determination *A* immediately belongs, also *B* is linked with it. In the second something, not only is this second determination mediated; also mediated is that its immediate ground is mediated, namely by virtue of its original connection with *B* in the first something. This connection is thus the ground of the ground *A*, and the *whole* ground-connection is present in the second something as posited or grounded.

3. Real ground shows itself to be the self-*external reflection* of ground; its complete mediation is the restoration of its identity with itself. But **11.314** because this identity has in the process equally acquired the externality of real ground, the formal ground-connection in this unity of itself and real ground is just as much self-positing as self-*sublating* ground; the ground-connection mediates itself with itself *through its negation*. The ground is at first, as the *original connection*, the connection of immediate content determinations. The ground-connection, being essential form, has for sides such that are sublated or are as moments. Consequently, as the form of *immediate* determinations, it connects itself with itself as self-identical while at the same time connecting with their *negation*; accordingly, it is ground not in and for itself but as connected with the *sublated* ground-connection. – Second, the sublated connection or the immediate, which in the original and in the posited connection is the identical *substrate*, is likewise real ground not in and for itself; that it is ground is rather posited by virtue of that original link. –

Thus the ground-connection is in its totality essentially *presupposing* reflection; formal ground presupposes the *immediate* content determination, and this content presupposes form as real ground. Ground is therefore form as an immediate linkage but in such a manner that it repels itself from itself and rather presupposes immediacy, referring itself therein as to another. This immediate is the content determination, the simple *ground*; but as such, that is, as ground, it is equally repelled from itself and refers itself to itself equally as to an other. – Thus the total ground-connection has taken on the determination of *conditioning mediation*.

C. CONDITION

a. The relatively unconditioned

1. Ground is the immediate, and the grounded the mediated. But ground is positing reflection; as such, it makes itself into positedness and is presupposing reflection; as such it refers itself to itself as to something sublated, to an immediate through which it is itself mediated. This mediation, as an advance from the immediate to the ground, is not an external reflection but, as we have seen, the ground's own doing or, what is the same, the ground-connection, as reflection into its self-identity, is just as essentially self-externalizing reflection. The immediate to which ground refers as to its
11.315 essential presupposition is *condition*; real ground is accordingly essentially conditioned. The determinateness that it contains is the otherness of itself.

Condition is therefore, *first*, an immediate, manifold existence. *Second*, it is this existence referred to an other, to something which is ground, not of this existence but in some other respect, for existence itself is immediate and without ground. According to this reference, it is something *posited*; as condition, the immediate existence is supposed to be not for itself but for another. But this, that it thus is for another, is at the same time itself only a positedness; that it is posited is sublated in its immediacy: an *existence is indifferent to being a condition*. *Third*, condition is something immediate in the sense that it constitutes the *presupposition* of ground. In this determination, it is the form-connection of ground withdrawn into self-identity, hence the content of ground. But content is as such only the indifferent unity of ground, as in the form: without form, no content. It nevertheless frees itself from this indifferent unity in that the ground-connection, in the *complete* ground, becomes a connection external to its identity, whereby content acquires immediacy. In so far, therefore, as condition is that in which the ground-connection has its *identity* with itself, it constitutes the content of ground; but since this content is indifferent to form, it is only *implicitly* the content of form, is something which *has yet* to become content and hence constitutes the *material* for the ground. Posited as condition, and in accordance with the second moment, existence is determined to lose its indifferent immediacy and to become the moment of another. By virtue of its immediacy, it is indifferent to this connection; inasmuch as it enters into it, however, it constitutes the *in-itself* of the ground and is for it the *unconditioned*. In order to be condition, it has its presupposition in the ground and is itself conditioned; but this condition is external to it.

2. Something is not through its condition; its condition is not its ground. Condition is for the ground the moment of unconditioned immediacy, but is not itself the movement and the positing that refers itself to itself negatively and that makes itself into a positedness. Over against condition there stands, therefore, the *ground-connection*. Something has, besides its condition, also a ground. – This ground is the empty movement of reflection, for the latter has the immediacy which is its presupposition outside it. But it is the whole form and the self-subsistent process of mediation, for the condition is not its ground. Since this mediating refers itself to itself as positing, it equally is according to this side something immediate and *unconditioned*; it does indeed presuppose itself, but as an externalized or sublated positing; whatever it is in accordance with its determination, **11.316** that it is, on the contrary, in and for itself. – Inasmuch as the ground-connection is thus a self-subsisting self-reference and has within it the identity of reflection, it has a *content which is peculiarly its own* as against the content of the condition. The one content is that of the ground and is therefore essentially informed; the other content, that of the condition, is on the contrary only an immediate material whose connecting reference to the ground, while at the same time constituting the in-itself of the latter, is also equally external to it; it is thus a mingling of a self-subsisting content that has no reference to the content of the ground determination and of the content that enters into the latter and, as its material, should become a moment of it.

3. The two sides of the whole, *condition and ground*, are thus, on the one hand, *indifferent* and *unconditioned* with respect to each other: the one as the non-referred-to side, to which the connecting reference in which it is the condition is external; the other as the connecting reference, or form, for which the determinate existence of the condition is only a material, something passive whose form, such as it possesses on its own account, is unessential. On the other hand, the two sides are also *mediated*. Condition is the *in-itself* of the ground; so much is it the essential moment of the ground-connection, that it is the simple self-identity of the ground. But this also is sublated; this in-itself is only something posited; immediate existence is indifferent to being a condition. The fact, therefore, that condition is the *in-itself* of the ground constitutes the side of it by which it is a mediated condition. Likewise, the ground-connection has in its self-subsistence also a presupposition; it has its in-itself outside itself. – Consequently, each of the two sides is this *contradiction*, that they are indifferent immediacy and essential mediation, both in *one* reference – or the contradiction of independent subsistence and of being determined as only moments.

b. The absolutely unconditioned

At first, each of the two relatively unconditioned sides reflectively shines in the other; condition, as an immediate, is reflected in the form connection of the ground, and this form in the immediate existence as its positedness; but each, apart from this reflective shine of its other in it, stands out on its own and has a content of its own.

Condition is at first immediate existence; its form has these two moments: that of *positedness*, according to which it is, as condition, material and moment of the ground; and that of the *in-itself*, according to which it constitutes the essentiality of ground or its simple reflection into itself.
11.317 Both sides of the form are external to immediate existence, for the latter is the sublated ground-connection. – But, *first*, existence is in it only this: to sublate itself in its immediacy and to founder, going to the ground. *Being* is as such only the *becoming* of essence; it is its essential nature to make itself into a positedness and into an identity which is an immediacy through the negation of itself. The form determinations of positedness and of self-identical *in-itself*, the form through which immediate existence is condition, are not, therefore, external to that existence; the latter is, rather, this very reflection. *Second*, as condition, being is now posited as that which it essentially is, namely as a moment and consequently as the being of an other, and at the same time as the in-itself of an other; it is *in itself* but only through the negation of itself, namely through the ground and through its self-sublating and consequent presupposing reflection; the in-itself of being is thus only something posited. This in-itself of the condition has two sides: one side is its essentiality as essentiality of the ground, while the other is the immediacy of its existence. Or rather, both sides are the same thing. Existence is an immediate, but immediacy is essentially something mediated, namely through the self-sublating ground. Existence, as this immediacy mediated by a self-sublating mediating, is at the same time the in-itself of the ground and its unconditioned side; but again, this in-itself is at the same time itself equally only moment or positedness, since it is mediated. – Condition is, therefore, the whole form of the ground-connection; it is the presupposed in-itself of the latter, but, consequently, is itself a positedness and its immediacy is this, to make itself into a positedness and thereby to repel itself from itself, in such as way that it both founders to the ground and is ground, the ground that makes itself into a positedness and thereby into a grounded, and both are one and the same.

Likewise in the conditioned ground, the in-itself is not just as the reflective shining of an other in it. This ground is the self-subsistent, that is, self-referring reflection of the positing, and consequently the self-identical; or it is in it its in-itself and its content. But it is at the same time presupposing reflection; it negatively refers to itself and posits its in-itself as an other opposite to it, and condition, according to both its moment of in-itself and of immediate existence, is the ground-connection's own moment; the immediate existence essentially is only through its ground and is a moment of itself as a presupposing. This ground, therefore, is equally the whole itself.

What we have here, therefore, is only *one* whole of *form*, but equally so only *one* whole of *content*. For the proper content of condition is essential **11.318**
content only in so far as it is the self-identity of reflection in the form, or the ground-connection is in it this immediate existence. Further, this existence is condition only through the presupposing reflection of the ground; it is the ground's self-identity, or its content, to which the ground posits itself as opposite. Therefore, the existence is not a merely formless material for the ground-connection; on the contrary, because it has this form in it, it is informed matter, and because in its identity with it it is at the same time indifferent to it, it is content. Finally, it is the same content as that possessed by the ground, for it is precisely content as that which is self-identical in the form connection.

The two sides of the whole, condition and ground, are therefore *one* essential unity, as content as well as form. They pass into one another, or, since they are reflections, they posit themselves as sublated, refer themselves to this their negation, and *reciprocally presuppose each other*. But this is at the same time only *one* reflection of the two, and their presupposing is, therefore, one presupposing only; the reciprocity of this presupposing ultimately amounts to this, that they both presuppose *one* identity for their subsistence and their substrate. This substrate, the one content and unity of form of both, is the *truly unconditioned*; *the fact in itself*. – Condition is, as it was shown above,[20] only the relatively unconditioned. It is usual, therefore, to consider it as itself something conditioned and to ask for a new condition, whereby the customary *progression ad infinitum* from condition to condition is set in motion. But now, why is it that at one condition a new condition is asked for, that is, why is that condition assumed to be something conditioned? Because it is some finite determinate existence

[20] Cf. above, 11.316.

or other. But this is a further determination of condition that does not enter into its concept. Condition is as such conditioned solely because it is the posited in-itselfness; it is, therefore, sublated in the absolutely unconditioned.

Now this contains within itself the two sides, condition and ground, as its moments; it is the unity to which they have returned. Together, the two constitute its form or its positedness. The unconditioned fact is the condition of both, but the condition which is absolute, that is to say, one which is itself ground. – As *ground*, the fact is now the negative identity that has repelled itself into those two moments: *first*, in the shape of the sublated ground-connection, the shape of an immediate manifold void of unity and external to itself, one that refers to the ground as an other to it and at the same time constitutes its in-itself; *second*, in the shape of an inner, simple form which is ground, but which refers to the self-identical immediate as to an other, determining it as condition, that is, determining the in-itself of it as its own moment. – These two sides *pre*-suppose the totality, presuppose that it is that which posits them. Contrariwise, because
11.319 they *presuppose* the totality, the latter seems to be in turn also conditioned by them, and the fact to spring forth from its condition and its ground. But since these two sides have shown themselves to be an identity, the relation of condition and ground has disappeared; the two are reduced to a mere *reflective shine*; the absolutely unconditioned is in its movement of positing and presupposing only the movement in which this *shine* sublates itself. It is the fact's own doing that it conditions itself and places itself as ground over against its conditions; but in connecting conditions and ground, the fact is a reflection shining *in itself*; its relation to them is a *rejoining itself*.

c. Procession of the fact into concrete existence

The absolutely unconditioned is the absolute ground that is identical with its condition, the immediate fact as the truly essential. As ground, it refers negatively to itself and makes itself into a positedness; but this positedness is a reflection that is complete in both its sides and is in them the self-identical form of connection, as has transpired from its concept. This positedness is therefore *first* the sublated ground, the fact as an immediacy void of reflection, the side of the conditions. This is the *totality* of the determinations of the fact, the fact itself, but the fact as thrown into the externality of being, the restored circle of being. In condition, essence lets go of the unity of its immanent reflection; but it lets it go as an immediacy that now carries the character of being a *conditioning presupposition* and of

essentially constituting only one of its sides. – For this reason the conditions are the whole content of the fact, because they are the unconditioned in the form of formless being. But because of this form, they also have yet another shape besides the conditions of the content as this is in the fact as such. They appear as a manifold without unity, mingled with extra-essential elements and other circumstances that do not belong to the circle of existence as constituting the *conditions* of this *determinate* fact. – For the absolute, unrestricted fact, the *sphere of being itself* is the condition. The ground, returning into itself, posits that sphere as the first immediacy to which it refers as to its unconditioned. This immediacy, as sublated reflection, is *reflection* in the element of being, which thus forms itself as such into a whole; form proliferates as determinateness of being and thus appears as a manifold distinct from the determination of reflection and as a content indifferent to it. The unessential, which is in the sphere of being but which the latter sheds in so far as it is condition, is the determinateness of the immediacy into which the unity of form has sunk. This unity of **11.320**
form, as the connection of being, is in the latter at first as *becoming* – the passing over of a determinateness of being into another. But the becoming of being is also the coming to be of essence and a return to the ground. The existence that constitutes the conditions, therefore, is in truth not determined as condition by an other and is not used by it as material; on the contrary, it itself makes itself, through itself, into the moment of an other. – Further, the becoming of this existence does not start off from itself as if it were truly the first and immediate; on the contrary, its immediacy is something only presupposed, and the movement of its becoming is the doing of reflection itself. The truth of existence is thus that it is condition; its immediacy is solely by virtue of the reflection of the ground-connection that posits itself as sublated. Consequently, like immediacy, becoming is only the reflective shine of the unconditioned inasmuch as this presupposes itself and has its form in this presupposing, and hence the immediacy of being is essentially only a *moment* of the form.

The other side of this reflective shining of the unconditioned is the ground-connection as such, determined as form as against the immediacy of the conditions and the content. But this side is the form of the absolute fact that possesses the unity of its form with itself or its *content* within it, and, in determining this content as condition, in this very positing sublates the diversity of the content and reduces it to a moment; just as, contrariwise, as a form void of essence, in this self-identity it gives itself the immediacy of subsistence. The reflection of the ground sublates the immediacy of the conditions, connecting them and making them

moments within the unity of the fact; but the conditions are that which the unconditioned fact itself presupposes and the latter, therefore, sublates its own positing; consequently, its positing converts itself just as immediately into a *becoming*. – The two, therefore, are *one* unity; the internal movement of the conditions is a becoming, the return into the ground and the positing of the ground; but the ground as posited, and this means as sublated, is the immediate. The ground refers negatively to itself, makes itself into a positedness and grounds the conditions; in this, however, in that the immediate existence is thus determined as a positedness, the ground sublates it and only then makes itself into a ground. – This reflection is therefore the self-mediation of the unconditioned fact through its negation. Or rather, the reflection of the unconditioned is at first a presupposing, but this sublating of itself is immediately a positing which determines; secondly, in this positing the reflection is immediately the sublating of the presupposed and a determining from within itself; this determining is thus in turn the sublating of the positing: it is a becoming within itself. In this, the mediation as a turning back to itself through negation has disappeared; mediation is simple reflection reflectively shining within itself and groundless, absolute becoming. The fact's movement of being posited, *on the one hand* through its *conditions*, and on the other hand through
11.321 its ground, now is the *disappearing of the reflective shine of mediation*. The process by which the fact is posited is accordingly a *coming forth*, the simple self-staging of the fact *in concrete existence*, the pure movement of the fact to itself.

When all the conditions of a fact are at hand, the fact steps into concrete existence. The fact *is*, *before it exists concretely*; it is, first, as *essence* or as unconditioned; second, it has immediate existence or is determined, and this in the twofold manner just considered, on the one hand in its conditions and on the other in its ground. In the former case, it has given itself the form of the external, groundless being, for as absolute reflection the fact is negative self-reference and makes itself into its presupposition. This presupposed unconditioned is, therefore, the groundless immediate whose being is just to be there, without grounds. If, therefore, all the conditions of the fact are at hand, that is, if the totality of the fact is posited as a groundless immediate, then this scattered manifold *internally recollects* itself. – The whole fact must be there, within its conditions, or all the conditions belong to its concrete existence; for the *all* of them constitutes the reflection of the fact. Or again, immediate existence, since it is condition, is determined by form; its determinations are therefore determinations of reflection and with the positing of one the rest also

are essentially posited. – The *recollecting* of the conditions is at first the foundering to the ground of immediate existence and the coming to be of the ground. But the ground is thereby a posited ground, that is, to the extent that it is ground, to that extent it is sublated as ground and is immediate being. If, therefore, all the conditions of the fact are at hand, they sublate themselves as immediate existence and as presupposition, and the ground is equally sublated. The latter proves to be only a reflective shine that immediately disappears; this coming forth is thus the tautological movement of the fact to itself: its mediation through the conditions and through the ground is the disappearing of both of these. The coming forth into concrete existence is therefore so immediate, that it is mediated only by the disappearing of the mediation.

The fact proceeds from the ground. It is not grounded or posited by it in such a manner that the ground would still stay underneath, as a substrate; on the contrary, the positing is the outward movement of ground to itself and the simple disappearing of it. Through its *union* with the conditions, it obtains the external immediacy and the moment of being. But it does not obtain them as a something external, nor by referring to them externally; rather, as ground it makes itself into a positedness; its simple essentiality rejoins itself in the positedness and, in this sublating of itself, it is the disappearing of its difference from its positedness, and is thus simple essential immediacy. It does not, therefore, linger on as something distinct from the grounded; on the contrary, the truth of the grounding is that in **11.322** grounding the ground unites with itself, and its reflection into another is consequently its reflection into itself. The fact is thus the *unconditioned* and, as such, equally so the *groundless*; it arises from the ground only in so far as the latter has *foundered* and is no longer ground: it rises up from the groundless, that is, from its own essential negativity or pure form.

This immediacy, mediated by ground and condition and self-identical through the sublating of mediation, is *concrete existence*.

SECTION II

Appearance

Essence must appear.

Being is the absolute abstraction; this negativity is not something external to it, but being is rather being, and nothing but being, only as this absolute negativity. Because of this negativity, being is only as self-sublating being and is *essence*. But, conversely, essence as simple self-equality is likewise *being*. The doctrine of being contains the first proposition, "being is essence." The second proposition, "essence is being," constitutes the content of the first section of the doctrine of essence. But this being into which essence makes itself is *essential being*, *concrete existence*,[1] a being which has come forth out of negativity and inwardness.

Thus essence *appears*. Reflection is the internal *shining* of essence. The determinations of this reflection are included in the unity purely and simply as posited, sublated; or reflection is essence immediately identical with itself in its positedness. But since this essence is ground, through its self-sublating reflection, or the reflection that which returns into itself, essence determines itself as something real; further, since this real determination, or the otherness, of the ground-connection sublates itself in the reflection of the ground and becomes concrete existence, the form determinations acquire therein an element of independent subsistence. Their *reflective shine* comes to completion in *appearance*.

The essentiality that has advanced to immediacy is, *first*, *concrete existence*, and a concrete existent or *thing* – an undifferentiated unity of essence and its immediacy. The thing indeed contains reflection, but its negativity is at first dissolved in its immediacy; but, because its ground is essentially reflection, its immediacy is sublated and the thing makes itself into a positedness.

Second, then, it is *appearance*. Appearance is what the thing is in itself, or the truth of it. But this concrete existence, only posited and reflected into

[1] *die Existenz.*

otherness, is equally the surpassing of itself into its infinity; opposed to the world of appearance there stands the *world* that *exists in itself* reflected into itself. **11.324**

But the being that appears and essential being stand referred to each other absolutely. Thus concrete existence is, *third*, essential *relation*; what appears shows the essential, and the essential is in its appearance. – Relation is the still incomplete union of reflection into otherness and reflection into itself; the complete interpenetrating of the two is *actuality*.

CHAPTER 1

Concrete existence

Just as the principle of sufficient reason says that *whatever is has a ground*, *or is something posited*, *something mediated*, so there would also have to be a principle of concrete existence saying that *whatever is*, *exists concretely*. The truth of being is to be, not an immediate something, but essence that has come forth into immediacy.

But when it was further said that *whatever exists concretely has a ground and is conditioned*, it also would have had to be said that *it has no ground and is unconditioned*. For concrete existence is the immediacy that has come forth from the sublating of the mediation that results from the connection of ground and condition, and which, in coming forth, sublates this very coming forth.

Inasmuch as mention may be made here of the proofs *of the concrete existence*[2] *of God*, it is first to be noted that besides immediate *being* that comes first, and *concrete existence* (or the being that proceeds from essence) that comes second, there is still a third being, one that proceeds from the concept, and this is *objectivity*. – Proof is, in general, *mediated cognition*. The various kinds of being require or contain each its own kind of mediation, and so will the nature of the proof also vary accordingly. The *ontological proof* wants to start from the concept; it lays down as its basis the sum total of all realities, where under reality also concrete existence is subsumed. Its mediation, therefore, is that of the syllogism, and syllogism is not yet under consideration here. We have already commented above (Part 1, Section 1)[3] on Kant's objection to the ontological proof, and have remarked that by *concrete existence* Kant understands the *determinate immediate* existence
11.325 with which something enters into the context of total experience, that is, into the determination of *being an other* and of being in reference to an *other*. As an existent concrete in this way, something is thus mediated by

[2] *Existenz*.

[3] Hegel is referring to the 1812 edition (cf. 11.47ff.). For the corresponding comment in the 1832 edition, cf. 21.73ff.

an other, and concrete existence is in general the side of its mediation. But in what Kant calls the concept, namely, something taken as only simply *self-referring*, or in representation as such, this mediation is missing; in abstract self-identity, opposition is left out. Now the ontological proof would have to demonstrate that the absolute concept, namely the concept of God, attains to a determinate existence, to mediation, or to demonstrate how simple essence mediates itself with mediation. This is done by the just mentioned subsumption of concrete existence under its universal, namely reality, which is assumed as the middle term between God in his concept, on the one hand, and concrete existence, on the other. – This mediation, inasmuch as it has the form of a syllogism, is not at issue here, as already said. However, how that mediation of essence and concrete existence truly comes about, this is contained in the preceding exposition. The nature of the proof itself will be considered in the doctrine of cognition. Here we have only to indicate what pertains to the nature of mediation in general.

The proofs of the existence of God adduce a *ground* for this existence. It is not supposed to be an objective ground of the existence of God, for this existence is in and for itself. It is, therefore, solely a *ground for cognition*. It thereby presents itself as a ground that *vanishes* in the subject matter that at first seems to be grounded by it. Now the ground which is derived from the contingency of the world entails the regress of the latter into the absolute essence, for the accidental is that which is in itself *groundless* and self-sublating. In this way, therefore, the absolute essence does indeed proceed from that which has no ground, for the ground sublates itself and with this there also vanishes the reflective shine of the relation that was given to God, that it is grounded in an other. This mediation is therefore true mediation. But the reflection involved in that proof does not know the nature of the mediation that it performs. On the one hand, it takes itself to be something merely subjective, and it consequently distances its mediation from God himself; on the other hand, for that same reason it also fails to recognize its mediating movement, that this movement is in the *essence itself* and how it is there. The true relation of reflection consists in being both in one: mediation as such but, of course, at the same time a subjective, external mediation, that is to say, a self-external mediation which *in turn internally sublates itself*. In that other presentation, however, concrete existence is given the false relation of appearing only as *mediated* or posited.

So, on the other side, concrete existence also cannot be regarded merely as an *immediate*. Taken in the determination of an immediacy, the comprehension of God's concrete existence has been declared to be beyond proof,

11.326 and the knowledge of it an immediate consciousness *only*, a *faith*. Knowledge should arrive at the conclusion that it knows *nothing*, and this means that it *gives up* its *mediating* movement and the determinations themselves that have come up in the course of it. This is what has also occurred in the foregoing; but it must be added that reflection, by ending up with the sublation of itself, does not thereby have *nothing* for result, so that the positive knowledge of the essence would then be an *immediate* reference to it, *divorced* from that result and self-originating, an act that starts only from itself; on the contrary, the end itself, the *foundering* of the mediation, is at the same time the *ground* from which the immediate proceeds. In "*zu Grunde gehen*," the German language unites, as we remarked above,[4] the meaning of *foundering* and of *ground*; the essence of God is said to be the *abyss* (*Abgrund* in German) for finite reason. This it is, indeed, in so far as reason surrenders its finitude therein, and sinks its mediating movement; but this *abyss*, the negative ground, is at the same time the *positive* ground of the emergence of the existent, of the essence immediate in itself; mediation is an *essential moment*. Mediation through ground sublates itself but does not leave the ground standing under it, so that what proceeds from it would be a *posited* that has its essence elsewhere; on the contrary, this ground is, as an abyss, the vanished mediation, and, conversely, only the vanished mediation is at the same time the ground and, only through this negation, the self-equal and immediate.

Concrete existence, then, is not to be taken here as a *predicate*, or as a *determination* of essence, of which it could be said in a proposition, "essence exists concretely," or "it *has* concrete existence." On the contrary, essence has passed over into concrete existence; concrete existence is the absolute self-emptying of essence, an emptying that leaves nothing of the essence behind. The proposition should therefore run: "Essence is concrete existence; it is not distinct from its concrete existence." – Essence *has passed over* into concrete existence inasmuch as essence as ground no longer distinguishes itself from itself as grounded, or inasmuch as the ground has sublated itself. But this negation is no less essentially its position, or the simply positive continuity with itself; concrete existence is the reflection *of the ground* into itself, its self-identity as attained in its negation, therefore the mediation that has posited itself as identical with itself and through that is immediacy.

Now because concrete existence is essentially *self-identical mediation*, it *has* the determinations of mediation *in it*, but in such a way that the

[4] Cf. above, 11.283.

determinations are at the same time reflected into themselves and have essential and immediate subsistence. As an immediacy which is posited through sublation, concrete existence is negative unity and being-within-itself; it therefore immediately determines itself as a concrete *existent* and as *thing*. **11.327**

A. THE THING AND ITS PROPERTIES

Concrete existence as a *concrete existent* is posited in the form of the negative unity which it essentially is. But this negative unity is at first only *immediate* determination, hence the oneness[5] of the *something* in general. But the concretely existent something is different from the something that exists immediately. The former is essentially an immediacy that has arisen through the reflection of mediation into itself. The concretely existent something is thus a *thing*.

The *thing* is distinct from its *concrete existence* just as the *something* can be distinguished from its *being*. The thing and the concrete existent are immediately one and the same. But because *concrete* existence is not the first immediacy of being but has the moment of mediation within it, its further determination as thing and the distinguishing of the two is not a transition but truly an analysis. Concrete existence as such contains this very distinction in the moment of its mediation: the distinction of *thing-in-itself* and *external* concrete existence.

a. The thing in itself and concrete existence

1. The *thing in itself* is the concrete existent as the *essential immediate* that has resulted from the sublated mediation. Mediation is therefore equally essential to it; but this distinction in this first or immediate concrete existence falls apart into *indifferent determinations*. The one side, namely the mediation of the thing, is its *non-reflected immediacy*, and hence its being in general; and this being, since it is at the same time determined as mediation, is an existence which is *other to itself*, *manifold* and *external* within itself. But it is not just immediate existence; it also refers to the sublated mediation and the essential immediacy; it is therefore immediate existence as *unessential*, as positedness. – (When the thing is differentiated from its concrete existence, it is then the *possible*, the thing of representation, or the thing of thought, which as such is at the same time not supposed to

[5] *das Eins.*

exist. However, the determination of possibility and of the opposition of the thing and its concrete existence comes later.) – But the thing-in-itself and its mediated being are both contained in the concrete existence, and both are themselves concrete existences; the thing-in-itself exists concretely and is the essential concrete existence, but the mediated being is the thing's
11.328 unessential concrete existence.

The *thing in itself*, as the simple reflectedness of the concrete existence within itself, is not the ground of unessential existence; it is the unmoved, indeterminate unity, for it has precisely the determination of being the sublated mediation, and is therefore the *substrate* of that existence. For this reason reflection, too, as an immediate existence which is mediated through some other, falls *outside the thing-in-itself*. The latter is not supposed to have any determinate manifold in it; for this reason it obtains it only when *exposed to external reflection*, though it remains indifferent to it. (The thing-in-itself has color only when exposed to the eye, smell when exposed to the nose, and so on.) Its diversity consists of aspects which an other picks out, specific points of reference which this other assumes with respect to the thing-in-itself and which are not the thing's own determinations.

2. Now this other is reflection which, determined as external, is, *first*, *external to itself* and determinate manifoldness. *Second*, it is external to the essential concrete existent and *refers* to it as to its absolute *presupposition*. These two moments of external reflection, its own manifoldness and its reference to the thing-in-itself as its other, are however one and the same. For this concrete existence is external only in so far as it refers to the essential identity as *to an other*. The manifoldness, therefore, does not have an independent subsistence of its own besides the thing-in-itself but, over against it, it is rather only as reflective shine; in its necessary reference to it, it is like a reflex refracting itself in it. Diversity, therefore, is present as the reference of an other to the thing-in-itself; but this other is nothing that subsists on its own but *is* only as reference to the thing-in-itself; but at the same time it only is in being repelled from it;[6] thus it is the unsupported rebound of itself within itself.[7]

Now since the thing-in-itself is the essential identity of the concrete existence, this essenceless reflection does not accrue to it but collapses within itself externally to it. It founders to the ground and thus itself comes to be essential identity or thing-in-itself. – This can also be looked at in this way: the essenceless concrete existence has in the thing-in-itself its reflection into itself; it refers to it in the first place as to its *other*; but as the

[6] *als das Abstossen von diesem.* [7] *der haltlose Gegenstoß seiner in sich selbst.*

other over against that which is in itself, it is only the sublation of its self, and its coming to be in the in-itself. The thing-in-itself is thus identical with external concrete existence.

This is exhibited in the thing-in-itself as follows. The thing-in-itself is *self-referring* essential concrete existence; it is self-identity only in so far as it holds negativity's reflection in itself; that which appeared as concrete existence external to it is, consequently, a moment in it. It is for this reason also self-repelling thing-in-itself which *thus relates itself to itself as to an other*. Hence, there are now a *plurality* of things-in-themselves standing in the reciprocal reference of external reflection. This unessential concrete **11.329**
existence is their reciprocal relation as others; but it is, further, also essential to them – or, in other words, this unessential concrete existence, in collapsing internally, is thing-in-itself, but a thing-in-itself which is *other* than the first, for that first is immediate essentiality whereas the present proceeds from the unessential concrete existence. But this other thing-in-itself is only an *other* in general; for, as self-identical thing, it has no further determinateness *vis-à-vis* the first; like the first, it is the reflection within itself of the unessential concrete existence. The determinateness of the various things-in-themselves over against one another falls therefore into external reflection.

3. This external reflection is henceforth a relating of the things-in-themselves to one another, *their reciprocal mediation* as others. The things-in-themselves are thus the extreme terms of a syllogism, the middle term of which is made up by their external concrete existence, the concrete existence by virtue of which they are other to each other and distinct. This, their difference, falls *only in their connecting reference*; they send determinations, as it were, from their surface into the reference, while remaining themselves indifferent to it. – This relation now constitutes the totality of the concrete existence. The thing-in-itself is drawn into a reflection external to it in which it has a manifold of determinations; this is the repelling of itself from itself into another thing-in-itself, a repelling which is its rebounding back into itself, for each thing-in-itself is an other only as reflected back from the other; it has its supposition not in itself but in the other, is determined only through the determinateness of the other; this other is equally determined only through the determinateness of the first. But the *two* things-in-themselves, since each has its difference not in it but in the other, are not therefore distinct things; the thing-in-itself, in relating as it should to the other extreme as to another thing-in-itself, relates to it as to something non-distinguished from it, and the external reflection that should constitute the mediating reference between the extremes is a

relation of the thing-in-itself only to itself, or is essentially its reflection within itself; the reflection is, therefore, determinateness existing in itself, or the determinateness of the thing-in-itself. The latter, therefore, does not have this determinateness in a reference, external to it, to another thing-in-itself, and of this other to it; the determinateness is not just its surface but is rather the essential mediation of itself with itself as with an other. – The two things-in-themselves that should constitute the extremes of the reference, since they are supposed not to have any contrasting determinateness, *collapse in fact into one*; it is only one thing-in-itself that relates itself to itself in the external reflection, and it is its *own reference to itself as to another* that constitutes its determinateness.

11.330 This determinateness of the thing-in-itself is the *property of the thing*.

b. Property

Quality is the *immediate* determinateness of something; the negative itself by virtue of which being is something. The *property* of the thing is, for its part, the negativity of reflection, by virtue of which concrete existence in general is a concrete existent and, as simple self-identity, is *thing-in-itself*. But the negativity of reflection, the sublated mediation, is itself essentially mediation and reference, though not to an other in general like quality which is not reflected determinateness; it is rather reference *to itself* as to an other, or *mediation* which immediately is *no less self-identity*. The abstract thing-in-itself is itself this relation which turns from another back to itself; it is thereby *determined in itself*; but its determinateness is *constitution*, which is as such itself *determination*, and in relating to the other it does *not* pass over into otherness and is *excluded* from *alteration*.

A thing has *properties*; these are, *first*, its determinate references to *something other*; the property is there only as a way of reciprocal relating; it is, therefore, the external reflection of the thing and the side of its positedness. But, *second*, in this positedness the thing is *in itself*; it maintains itself in its reference to the other and thus is admittedly only a surface where the concrete existence is exposed to the becoming of being and to alteration; the property is not lost in this. A thing has the property to effect this or that in an other, and in this connection to express itself in some characteristic way. It demonstrates this property only under the condition that another thing has a corresponding constitution, but at the same time the property is characteristically the thing's own and its self-identical substrate; for this reason this reflected quality is called *property*. The thing thereby passes over into an externality, but the property maintains itself in this transition.

Through its properties the thing becomes cause, and to be a cause is this, to preserve itself as effect. However, the thing is here still the static thing of many properties; it is not yet determined as actual cause; it is so far only the reflection of its determinations immediately existing in itself, not yet itself the reflection that posits them.

Essentially, therefore, the *thing-in-itself* has just shown itself to be thing-in-itself not only in such a way that its properties are the positedness of an external reflection; on the contrary, those properties are its own determinations by virtue of which it relates in some determinate manner; it is not an indeterminate substrate located on the other side of its external concrete existence but is present in its properties rather as ground, that is to say, it is self-identity in its positedness; but, at the same time, it is *conditioned* ground, that is to say, its positedness is equally reflection **11.331**
external to itself; it is reflected into itself and in itself only to the extent that it is external. – Through concrete existence the thing-in-itself enters into external references, and the concrete existence consists precisely in this externality; it is the immediacy of being and because of that the thing is subjected to alteration; but it is also the reflected immediacy of the ground, hence the thing *in itself* in its alteration. – This mention of the ground-connection is not however to be taken here as if the thing in general were determined as the ground of its properties; thinghood itself is, as such, the ground-connection; the property is not distinguished from its ground, nor does it constitute just the positedness but is rather the ground that has passed over into its externality and is consequently truly reflected into itself; the property is itself, as such, the ground, implicitly existent positedness; it is the ground, in other words, that constitutes the *form of the property's identity*, and the property's *determinateness* is the self-external reflection of the ground; the whole is the ground which in its repelling and determining, in its external immediacy, refers itself to itself. – The *thing-in-itself* thus *concretely exists* essentially, and that it concretely exists essentially means, conversely, that concrete existence, as external immediacy, is at the same time *in-itselfness*.

Remark

Mention was already made above (Section 1, p. 64)[8] of the *thing-in-itself* in connection with the moment of immediate existence,[9] of being-in-itself, and it was then remarked that the thing-in-itself is as such nothing

[8] Hegel is referring to the 1812 edition, as in GW 11, 59ff., especially 69ff. The parallel, but by no means identical, section in the 1832 edition is in 21.105ff.

[9] i.e. *Dasein.*

but the empty abstraction of all determinateness, of which *nothing* can of course be *known* just because it is supposed to be the abstraction of all determination. – Once the thing-in-itself has been presupposed in this way, all determination falls outside it into an alien reflection to which it is indifferent. For *transcendental idealism*, this external reflection is *consciousness*. Now on this standpoint, because this philosophical system relegates to consciousness every determinateness of things, both according to form and content, it falls in *me*, in the subject, whether I see the leaves of a tree not as black but green, the sun as round and not square, whether I taste sugar as sweet and not bitter; or again, whether I determine that the first and the second stroke of a clock are successive and not simultaneous, or that the first is cause and not effect, etc. – This crude display of subjective idealism is directly contradicted by the consciousness of the
11.332 freedom in accordance with which I know myself as rather the universal and indeterminate, and I separate off from myself those manifold and necessary determinations, recognizing them to be something external to me and pertaining only to things. – In this consciousness of its freedom the "I" is to itself the true internally reflected identity which the thing-in-itself was supposed to be. – I have shown elsewhere[10] that that transcendental idealism does not escape from the restriction of the "I" by the object; in general, that it does not escape from the finite world, but that it only alters the *form* of the restriction, which remains absolute to it. This it does by simply transposing it from an objective to a subjective shape; by turning it into determinacies of the "I," into an unruly alternation of these that occurs within the "I" as if this were a thing, the kind of thing which for ordinary consciousness is a manifold of determinacies and alterations only pertaining to things outside it. – In the present treatment, only the thing-in-itself and the reflection at first external to it stand opposed; the latter has not yet determined itself as consciousness, nor the thing-in-itself as "I." What has resulted from the nature of the thing-in-itself and of the external reflection is that this same externality determines itself to be the thing-in-itself, or, conversely, that it becomes the determination belonging to that first thing-in-itself. The inadequacy now of the standpoint at which that philosophy remains fixed consists essentially in its holding on to *the abstract thing-in-itself* as to an *ultimate determination*, or in opposing the determinateness and manifoldness of the properties to the thing-in-itself, whereas the latter in fact possesses that external reflection essentially within it and determines itself as one endowed with determinations that are its

[10] Hegel is referring to the 1812 edition. Cf. GW 11, 18. Cf. 21.31.

own, with properties, in this way demonstrating that the abstraction of the thing as a pure thing-in-itself is an untrue determination.

c. The reciprocal action of things

The thing-in-itself *exists in concreto* by essence; external immediacy and determinateness belong to its being-in-itself, or to its immanent reflection. The thing in-itself is thus a thing that has properties, and hence there are a number of things distinct from one another, not because of some viewpoint alien to them but through themselves. These many diverse things stand in essential reciprocal action by virtue of their properties; the property is this reciprocal connecting reference itself, apart from which the thing is nothing; the reciprocal determination, the middle term of the things-in-themselves that are taken as extreme terms indifferent to the reference **II.333** connecting them, is itself the self-identical reflection and the thing-in-itself which those extremes were supposed to be. Thinghood is thus reduced to the form of indeterminate self-identity having its essentiality only in its property. Thus, if one speaks of a thing or of things in general without a determinate property, then their difference is merely indifferent, quantitative. What is considered as a thing can just as well be made into a plurality of things or be considered as a plurality of things; their *separation* or their *union* is an external one. – A book is a thing, and each of its pages is also a thing, and equally so every tiny piece of its pages, and so on to infinity. The determinateness, in virtue of which *a* thing is *this* thing only, lies solely in its properties. It is through them that the thing differentiates itself from other things, for the property is the negative reflection and the differentiating; only in its property, therefore, does the thing possess in it the difference of itself from others. This is the difference reflected into itself, by virtue of which the thing, in its positedness, that is, in its reference to others, is equally indifferent to the other and to its reference to it. Without its properties, therefore, there is nothing that remains to the thing except the unessential compass and the external gathering of an abstract in-itselfness. With this, *thinghood has passed over into property*.

The thing, as the extreme term that exists in itself, was supposed to relate to the property, and this property to constitute the middle term between things that stand connected. But this connection is where the things meet as *self-repelling reflection*, where they are distinguished and connected. This, their distinction and their connecting reference, is one reflection and *one continuity* of both. Accordingly, the things themselves fall only within this

continuity which is the property; they vanish as would-be self-subsisting extremes that would have a concrete existence outside this property.

The *property*, which was supposed to *connect* the self-subsisting extremes, is therefore *itself self-subsistent*. The things are, on the contrary, the unessential. They are *something essential* only as the self-differentiating and self-referring reflection; but this is the property. The latter is in the thing, therefore, not as something sublated, not just a moment of it; on the contrary, the truth of the thing is that it is only an unessential compass which is indeed a negative unity, but only like the one of the something, that is to say, a one which is *immediate*. Whereas earlier the thing was determined as an unessential compass because it was made such by an external abstraction that omits the property, this abstraction now happens through the transition of the thing-in-itself into the property itself. But there is
11.334 now an inversion of values, for the earlier abstraction still envisaged the abstract thing without its property as being the essential, and the property as an external determination, whereas it is the thing as such which is now reduced, through itself, to the determination of an indifferent external form of the property. – The latter is henceforth thus freed of the indeterminate and impotent *bond* which is the unity of the thing; the property is what constitutes the *subsistence* of the thing; it is a *self-subsisting matter*. – Since this matter is simple continuity with itself, it only possesses at first the form of *diversity*. There is, therefore, a *manifold* of these self-subsisting matters, and *the thing consists of them*.

b. the constitution of the thing out of matters

The transition of *property* into a *matter* or into a self-subsistent *stuff* is the familiar transition performed on sensible matter by chemistry when it seeks to represent the *properties* of color, smell, etc., as *luminous matter*, *coloring matter*, *odorific matter*, sour, bitter matter and so on; or when it simply assumes others, like *calorific matter*, electrical, magnetic matter, in the conviction that it has thereby gotten hold of properties as they truly are. – Equally current is the saying that things *consist* of various matters or stuffs. One is careful about calling these *matters* or *stuffs* "things," even though one will readily admit that, for example, a pigment is a thing; but I do not know whether luminous matter, for instance, or calorific matter, or electrical matter, etc., are called things. The distinction is made between things and their components without any exact statement as to whether these components also, and to what extent, are things or perhaps just half-things; but they are at least *concretes* in general.

The necessity of making the transition from properties to matters, or of assuming that the properties are truly matters, has resulted from the fact that they are what is the essential in things and consequently their true self-subsistence. – At the same time, however, the reflection of the property into itself constitutes only one side of the whole reflection, namely the sublation of the distinction and the continuity of the property (which was supposed to be a concrete existence for an other) with itself. Thinghood, as immanent negative reflection and as a distinguishing that repels itself from the other, has consequently been reduced to an unessential moment; at the same time, however, it has further determined itself. *First*, this negative moment has *preserved* itself, for property has become a matter continuous with itself and self-subsisting only inasmuch as the difference of things has *sublated* itself; thus the continuity of the property in the **11.335** otherness itself contains the moment of the negative, and, as this *negative unity*, its self-subsistence is at the same time the restored *something* of thinghood, negative self-subsistence versus the positive self-subsistence of the stuff. *Second*, the thing has thereby progressed from its indeterminacy to full determinateness. As *thing in itself*, it is *abstract* identity, *simple negative* concrete existence, or this concrete existence determined as the *indeterminate*; it is then determined through its properties, by virtue of which it is supposed to be distinguished from other things; but, since through the property the thing is rather continuous with other things, this imperfect distinction is sublated; the thing has thereby returned into itself and is now determined *as determined*; it is *determined in itself* or is *this thing*. –

But, *third*, this turning back into itself, though a self-referring determination, is at the same time an unessential determination; the self-continuous *subsistence* makes up the self-subsistent matter in which the difference of things, their determinateness existing in and for itself, is sublated and is something external. Therefore, although the thing as *this thing* is complete determinateness, this determinateness is such in the element of inessentiality.

Considered from the side of the movement of the property, this result follows in this way. The property is not only *external* determination but concrete existence *immediately existing in itself*. This unity of externality and essentiality repels itself from itself, for it contains reflection-into-itself and reflection-into-other, and, on the one hand, it is determination as *simple*, self-identical and self-referring self-subsistent in which the negative unity, the *one* of the thing, is sublated; on the other hand, it is this determination over against an other, but likewise as a one which is reflected into itself

and is determined in itself; it is, therefore, the *matters* and *this thing*. These are the two moments of self-identical externality, or of property reflected into itself. – The property was that by which things were supposed to be distinguished. Since the thing has freed itself of its negative side of inhering in an other, it has thereby also become free from its being determined by other things and has returned into itself from the reference connecting it to the other. At the same time, however, it is only *the thing-in-itself now become the other of itself*, for the manifold properties on their part have become self-subsistent and *their negative connection in the one of the thing* is now only a sublated connection. Consequently, the thing is self-identical negation only *as against* the positive continuity of the material.

The "this" thus constitutes the complete determinateness of the thing, a determinateness which is at the same time an external determinateness. The thing consists of self-subsistent matters indifferent to the connection
11.336 they have in the thing. This connection is therefore only an unessential linking of them, the difference of one thing from another depending on whether there is in it a more or less of particular matters and in what amount. These matters overrun *this* thing, continue into others, and that they belong to this thing is no restriction for them. Just as little are they, moreover, a restriction for one another, for their negative connection is only the impotent "this." Hence, in being linked together in it, they do not sublate themselves; they are as self-subsistent, impenetrable to each other; in their determinateness they refer only to themselves and are a mutually indifferent manifold of subsistence; the only limit of which they are capable is a quantitative one. – The thing as *this* is just their merely quantitative connection, a mere collection, their "also." The thing *consists* of some quantum or other of a matter, *also* of the quantum of another, and *also* of yet another; this combination, of not having any combination alone constitutes the thing.

c. dissolution of the thing

This thing, in the manner it has determined itself as the merely quantitative combination of free matters, is the absolutely alterable. Its alteration consists in one or more matters being dropped from the collection, or being added to this "also," or in the rearrangement of the matters' respective quantitative ratio. The coming-to-be and the passing-away of *this* thing is the external dissolution of such an external bond, or the binding of such for which it is indifferent whether they are bound or not. The stuffs circulate

unchecked in or out of "this" thing, and the thing itself is absolute porosity without measure or form of its own.

So the thing, in the absolute determinateness through which it is a "this," is the absolutely dissoluble thing. This dissolution is an external process of being determined, just like the being of the thing; but its dissolution and the externality of its being is the essential of this being; the thing is only the "also"; it consists only of this externality. But it consists also of its matters, and not just the abstract "this" as such but the *"this" thing whole* is the dissolution of itself. For the thing is determined as an external collection of self-subsisting matters; such matters are not things, they lack negative self-subsistence; it is the properties which are rather self-subsistent, that is to say, are determined with a being which, as such, is reflected into itself. Hence the matters are indeed simple, referring only to themselves; but it is *their content* which is a *determinateness*; the immanent reflection is only *the form* of this content, a content which is not, as such, reflected-into-itself **II.337** but *refers to an other* according to its determinateness. The thing, therefore, is not only their "also," is not their reference to each other as indifferent but is, on the contrary, equally so their *negative* reference; and on account of their determinateness the matters are themselves this negative reflection which is the puncticity[11] of the thing. The one matter is not *what* the other is according to the determinateness of its content as contrasted to that of an other; and the one *is* not to the extent that the other is, in accordance with their self-subsistence.

The thing is, therefore, the connecting reference of the matters of which it consists to each other, in such a manner that the one matter, and the other *also*, *subsist* in it, and yet, at the same time, the one matter does *not* subsist in it in so far as the other does. To the extent, therefore, that the one matter is in the thing, the other is thereby sublated; but the thing is at the same time the "also," or the subsistence of the other matter. In the subsistence of the one matter, therefore, the other matter does *not* subsist, and it also no less subsists in it; and so with all these diverse matters in respect to each other. Since it is thus in the same respect as the one matter subsists that the other subsists also, and this one subsistence of both is the puncticity or the negative unity of the thing, the two *interpenetrate* absolutely; and since the thing is at the same time only the "also" of the matters, and these are reflected into their determinateness, they are indifferent to one another, and in interpenetrating they *do not touch*. The matters are, therefore, essentially *porous*, so that the one subsists in the *pores* or in the non-subsistence of

[11] *Punctualität.*

the others; but these others are themselves porous; in their pores or their non-subsistence the first and also all the rest subsist; their subsistence is at the same time their sublatedness and the subsistence of *others*; and this subsistence of the others is just as much their sublatedness and the *subsisting of the first* and equally so of all others. The thing is, therefore, the self-contradictory mediation of independent self-subsistence through its opposite, that is to say, through its negation, or of *one* self-subsisting matter through the *subsisting* and *non-subsisting* of an *other*. – In "*this*" *thing*, concrete existence has attained its completion, namely, that it is *at once* being that exists in itself, or *independent* subsistence, and *unessential* concrete existence. The truth of concrete existence is thus this: that it has its in-itself in unessentiality, or that it subsists in an other, indeed in the absolute other, or that it has *its own nothingness* for substrate. It is, therefore, *appearance*.

Remark

It is one of the commonest assumptions of ordinary thinking that *a thing consists of many self-subsisting matters*. On the one hand, the thing is treated
11.338 as having *properties*; the *thing* is their *substance*. But, on the other hand, these different determinations are regarded as matters, and their subsistence is not the thing; on the contrary, the converse is the case; it is the *thing* rather that *consists* of them and is itself only their external bond and quantitative limit. Both the properties and the matters are *the same content determinations*, except that in the former case these determinations are moments reflected into their negative unity which is a substrate distinct from them, the *thinghood*; whereas in the latter case, they are a variety of self-subsistent matters, each reflected into its own self-unity. These matters are now further determined as independent subsistence; but they are also together in a thing. This thing has the two determinations, *first*, of being a "this," and, *second*, of being the "also." The "also" is represented in external intuition as *spatial extension*; the "this," the negative unity, is instead the *puncticity* of the thing. The matters are together in this puncticity, and their "also" or their extension is everywhere this puncticity; for the "also," as thinghood, is essentially determined also as negative unity. Therefore, *where* one of these matters is, *in that one and same point* the other is; the thing does not have its color in one place, its aroma in another, its heat in a third, and so forth, but at the point where it is warm, there it is also colored, sour, electric, and so forth. Now because these stuffs are not outside one another but are in one "this," they are assumed as *porous*, so that one stuff concretely exists in the interstices of an other. But the one that occupies

the interstices of the other is itself porous; conversely, therefore, the other concretely exists in its pores; and this applies not just to this second stuff, but to a third also, a tenth, and so forth. They are all porous, and in the interstices of each all the others are present, just as each is present with the rest in the pores of every other. They are, therefore, an aggregate of matters that interpenetrates one another in such a way that in penetrating the others each is equally penetrated by them, so that each again penetrates its own penetratedness. Each is posited as its negation, and this negation is the subsistence of an other; but this subsistence is just as much the negation of this other and the subsistence of the first.

The well-known common excuse by which *ordinary thinking* evades the *contradiction* of an *independent* subsistence of *many* matters *in one thing*, or of the reciprocal *indifference* of these matter in their inter*penetration*, is that the parts and the pores are *very small*. Where the difference-in-itself, the contradiction and the negation of negation, comes into play; where it ought to be *conceptualized* as such, ordinary thinking falls back upon external, *quantitative* difference; where coming-to-be and passing-away are concerned, it takes refuge in gradualness, and, where being is the issue, in a *smallness* in which disappearing is reduced to *imperceptibility*, contradiction **II.339**
to a matter of confusion, and true relation is played out in the medium of vague representation, the obscurity of which rescues the self-sublation of the relation.

But when light is shone on this obscurity, it proves to be a contradiction (both subjective on the part of the representation and objective on the part of the subject matter), the elements of which are completely contained in pictorial representation itself. The latter runs into contradiction from the start for wanting, on the one hand, to hold on to *perception* and have before it things that have real being, and, on the other hand, for ascribing sensible existence to imperceptible things that are determined through reflection; the minute parts and the pores are at the same time supposed to be a sensible existence and their positedness is spoken of as if it were the same as the reality which belongs to color, heat, etc. If representation were to consider this *objective* fog more closely, the pores and the minute parts, it would discover in them not just a matter and *also* the negation of it – so that matter would be *here* and its negation *next to it*; the pore and *next* to it matter again, and so forth – but that in "this" thing it has, *in one and the same point*, (1) the *self-subsistent* matter, (2) its *negation* or porosity and the other *self-subsistent* matter, and that this porosity and the independent subsistence of the matters in one another as in one single point is a reciprocal negation and a penetration of the penetration. – Recent

accounts of physics regarding the expansion of steam in atmospheric air and of various kinds of gases in one another bring out with greater precision one side of the concept concerning the nature of a thing that has here come to view. They show, namely, that for example a certain volume holds just as much steam whether empty or full of atmospheric air; also that the various gases expand into one another in such a way that each is for the other as good as a vacuum, at least that they are not in any chemical bonding with each other, each remains *continuous with itself*, uninterrupted by the other, and in *penetrating the others* it remains itself *indifferent to them*. – But the further moment in the concept of a thing is that in the "this" one matter is present where another matter is, and that the penetrating matter is also penetrated at the same point, or that the self-subsistent is immediately the self-subsistence of an other. This is contradictory. But the thing is nothing else but this contradiction itself; that is why it is appearance.

We find in the spiritual realm a situation similar to that of these matters, in the conception of *forces* or *faculties of the soul*. Spirit is a "this," the negative unity in which its determinations interpenetrate, in a much more profound sense. But represented as soul, it is commonly taken as a *thing*.
11.340 Just as the human being in general is made to *consist* of soul and body, each of which is taken as something subsisting on its own, so also the soul is made to consist of so-called *soul-forces*, each of which has a self-subsistence of its own, or is an activity with direct effects specifically its own. The assumption is that the understanding operates on its own here, the imagination there; that one can cultivate the understanding, the memory, etc., each for itself, leaving the others aside for the time being until, perhaps, their turn comes up, or perhaps not. Although the faculties, since they are transposed into a materially simple *soul-thing* which as simple is allegedly *immaterial*, are not portrayed as particular matters, as *forces* they are nevertheless equally assumed to be *indifferent* to one another, just like those matters. But spirit is not the contradiction that the thing is, which dissolves itself and passes over into appearance. Rather, it already is within it the contradiction that has returned into its absolute unity, namely into the concept; the differences are no longer to be thought in it as self-subsistent but only as *particular* moments in the subject, the simple individuality.

CHAPTER 2

Appearance

11.341

Concrete existence is the immediacy of being to which essence has again restored itself. *In itself* this immediacy is the reflection of essence into itself. As concrete existence, essence has stepped out of its ground which has itself passed over into it. Concrete existence is this *reflected* immediacy in so far as, within, it is absolute negativity. It is now also *posited* as such, in that it has determined itself as *appearance*.

At first, therefore, appearance is essence in its concrete existence; essence is immediately present in it. That it is not immediate, but rather *reflected* concrete existence, constitutes the moment of essence in it; or concrete existence, as *essential* concrete existence, is appearance.

Something is *only* appearance – in the sense that concrete existence is as such only a posited being, not something that is in- and for-itself. This is what constitutes its essentiality, to have the negativity of reflection, the nature of essence, within it. There is no question here of an alien, external reflection to which essence would belong and which, by comparing this essence with concrete existence, would declare the latter to be appearance. On the contrary, as we have seen,[12] this essentiality of concrete existence, that it is appearance, is concrete existence's own truth. The reflection by virtue of which it is this is its own.

But if it is said that something is *only* appearance, meaning that as contrasted with it *immediate concrete existence* is the truth, then the fact is that appearance is the higher truth, for it is concrete existence as essential, whereas concrete existence is appearance that is still void of essence because it only contains in it the one moment of appearance, namely that of concrete existence as immediate, not yet negative, reflection. When *appearance* is said to be *essenceless*, one thinks of the moment of its negativity as if, by contrast with it, the immediate were the positive and the true; in fact, however, this immediate does not yet contain essential truth in it.

[12] Cf. above, 11.337.

Concrete existence rather ceases to be essenceless by passing over into appearance.

Essence *reflectively shines* at first just within, in its simple identity; as such, it is abstract reflection, the pure movement of nothing through nothing
11.342 back to itself. Essence *appears*, and so it now is *real* shine, since the moments of the shine have concrete existence. Appearance, as we have seen,[13] is the thing as the negative *mediation* of itself with itself; the differences which it contains are *self-subsisting* matters which are the contradiction of being an immediate subsistence, yet of obtaining their subsistence only in an alien self-subsistence, hence in the negation of their own, but then again, just because of that, also in the negation of that alien self-subsistence or in the negation of their own negation. Reflective shine is this same mediation, but its fleeting moments obtain in appearance the shape of immediate self-subsistence. On the other hand, the immediate self-subsistence which pertains to concrete existence is reduced to a moment. Appearance is therefore the unity of reflective shine and concrete existence.

Appearance now determines itself further. It is concrete existence as essential; as essential, concrete existence differs from the concrete existence which is unessential, and these two sides refer to each other. – Appearance is, therefore, *first*, simple self-identity which also contains diverse content determinations and, both as identity and as the connecting reference of these determinations, is that which remains self-equal in the flux of appearance; this is the *law of appearance*.

But, *second*, the law which is simple in its diversity passes over into opposition; the essential moment of appearance becomes opposed to appearance itself and, confronting the world of appearance, the world that *exists in itself* comes onto the scene.

Third, this opposition returns into its ground; that which is in itself is in the appearance and, conversely, that which appears is determined as taken up into its being-in-itself. Appearance becomes *relation*.

A. THE LAW OF APPEARANCE

1. Appearance is the concrete existent mediated through its *negation*, which constitutes its *subsistence*. This, its negation, is indeed another self-subsistent; but the latter is just as essentially something sublated. The concrete existent is consequently the *turning back* of itself into itself through its negation and through the negation of this negation; it has, therefore,

[13] Cf. above, 11.337.

essential self-subsistence, just as it is equally immediately an absolute *positedness* that has a ground and an other for its subsistence. – In the first place, therefore, appearance is concrete existence along with its essentiality, the positedness along with its ground; but this ground is the *negation*, and the other self-subsistent, the ground of the first, is equally only a positedness. Or the concrete existent is, as an appearance, reflected into an other and has this other for its ground, and this ground is itself only this, to be reflected **11.343** into another. The *essential* self-subsistence that belongs to it because it is a turning back into itself is, for the sake of the negativity of the moments, the return of nothing through nothing back to itself; the self-subsistence of the concrete existent is therefore only the *reflective shine of essence*. The linkage of the reciprocally grounding concrete existents consists, therefore, in this reciprocal negation, namely that the subsistence of the one is not the subsistence of the other but is its positedness, where this connection of positedness alone constitutes their subsistence. The ground is present as it is in truth, namely as being a first which is only a *presupposed*.

This now constitutes the *negative* side of appearance. In this negative mediation, however, there is immediately contained the *positive identity* of the concrete existent with itself. For this concrete existent is not *positedness vis-à-vis* an *essential ground*, or is *not the reflective shine in a self-subsistent*, but is rather *positedness* that refers itself to a *positedness*, or a *reflective shine* only in a *reflective shine*. In this, its negation, or in its other which is itself something sublated, it refers *to itself* and is thus self-identical or positive essentiality. – This identity is not the *immediacy* that pertains to concrete existence as such and only is its unessential moment of subsisting in an other. It is rather the *essential content* of appearance which has two sides: *first*, to be in the form of *positedness* or external immediacy; *second*, to be positedness as self-identical. According to the first side, it is as a determinate being, but one which in keeping with its immediacy is accidental, unessential, and subject to transition, to coming-to-be and passing-away. According to the other side, it is the simple content determination exempted from that flux, the *permanent element* in it.

This content, besides being in general the *simple element* of the transient, is also a *determined* content, *varied in itself*. It is the reflection of appearance, of the negative determinate being, into itself, and therefore contains *determinateness* essentially. Appearance is however the multifarious diversity of *immediately existing beings* that revels in unessential manifoldness; its reflected content, on the other hand, is its manifoldness reduced to *simple difference*. Or, more precisely, the determinate essential content is not just determined in general but, as the essential element of appearance,

is complete determinateness; *the one* and its *other*. Each of these two has in appearance its subsistence in the other, but in such a way that it is at the same time only in the other's *non-subsistence*. This contradiction sub-
II.344 lates itself; and its reflection into itself is the *identity* of their two-sided subsistence, namely that the *positedness of the one* is *also the positedness of the other*. The two constitute *one subsistence*, each at the same time as a *different* content indifferent to the other. In the essential side of appearance, the *negativity* of the unessential content, that it sublates itself, has thus gone back into identity; it is an indifferent *subsistence* which is not the sublatedness *of the other* but rather *its subsistence*.

This unity is the *law* of *appearance*.

2. The law is thus the *positive element* of the mediation of what appears. Appearance is at first concrete existence as *negative* self-mediation, so that the concrete existent, through its own non-subsistence, through an other and again through the *non-subsistence of this other*, is mediated with itself. In this there is contained, *first*, the merely reflective shining and the disappearing of both, the unessential appearance; *second*, also the *persistence* or the *law*; for each of the two *concretely exists* in the sublation of the other, and their positedness is as their negativity at the same time the *identical positive* positedness of both.

This permanent subsistence which appearance obtains in the law is thus, as it has determined itself, *first*, opposed to the *immediacy* of the being which concrete existence has. This immediacy is indeed one which is *in itself* reflected, namely the ground that has gone back into itself; but in appearance this simple immediacy is now distinguished from the reflected immediacy that first began to separate itself in the "thing." The concretely existing thing in its dissolution has become this opposition; the *positive element* of its dissolution is the said self-identity of what appears, a positedness in the positedness of its other. – *Second*, this reflected immediacy is itself determined as *positedness* over against the immediate determinate being of concrete existence. This positedness is henceforth what is essential and the true positive. The German expression *Gesetz* [*law*] likewise contains this note of positedness or *Gesetztsein*. In this positedness there lies the essential *connection* of the two sides of the difference that the law contains; they are a diverse content, each immediate with respect to the other, and they are this as the reflection of the disappearing content belonging to appearance. As essential difference, the different sides are simple, self-referring determinations of content. But just as equally, neither is immediate, just for itself, but is rather essential *positedness*, or *is only to the extent that the other is*.

Third, appearance and law have one and the same content. The law is the *reflection* of appearance into self-identity; appearance, as an *immediate* which is null, thus stands opposed to that which is *immanently reflected*, and the two are distinguished according to form. But the reflection of appearance by virtue of which this difference is, is also the essential identity **11.345** of appearance itself and its reflection, and this is in general the nature of reflection; it is what in the positedness is self-identical and indifferent to that difference, which is form or positedness – hence a content *continuous* from appearance to law, the content of the law and of the appearance.

This content thus constitutes the *substrate* of appearance; the law is this *substrate* itself, appearance is the same content but contains still more, namely the unessential content of its immediate being. And so is also the form determination by which appearance as such is distinguished from the law, namely a *content* and equally a content distinguished from the content of the law. For concrete existence, as immediacy in general, is likewise a self-identity of matter and form which is indifferent to its form determinations and is, therefore, a content; the concrete existence is the thinghood with its properties and matters. But it is the content whose self-subsisting immediacy is at the same time also only a non-subsistence. But the self-identity of the content in this its non-subsistence is the other, essential content. This identity, the substrate of appearance, which constitutes law, is appearances's own moment; it is the positive side of the essentiality by virtue of which concrete existence is appearance.

The law, therefore, is not beyond appearance but is immediately *present* in it; the kingdom of laws is the *restful* copy of the concretely existing or appearing world. But, more to the point, the two are one totality, and the concretely existing world is itself the kingdom of laws which, simple identity, is at the same time self-identical in the positedness or in the self-dissolving self-subsistence of concrete existence. In the law, concrete existence returns to its ground; appearance contains both of these, the simple ground and the dissolving movement of the appearing universe, of which the law is the essentiality.

3. The law is therefore the *essential* appearance; it is the latter's reflection into itself in its positedness, the *identical* content of itself and the unessential concrete existence. *In the first place*, this identity of the law with its concrete existence is now, to start with, *immediate*, simple identity, and the law is indifferent with respect to its concrete existence; appearance still has another content as contrasted with the content of the law. That content is indeed the unessential one and the return into the latter; but for the law it is an original starting point not posited by it; as content, therefore,

it is *externally bound up* with the law. Appearance is an aggregate of more detailed determinations that belong to the "this" or the concrete, and are
11.346 not contained in the law but are rather determined each by an other. – *Secondly*, that which appearance contains distinct from the law determined itself as something positive or as another *content*; but it is essentially a *negative*; it is the form and its movement is a movement that belongs to appearance. The kingdom of laws is the *restful* content of appearance; the latter is this same content but displayed in *restless* flux and as reflection-into-other. It is the law as negative, relentlessly self-mutating concrete existence, the *movement* of the passing over into the opposite, of self-sublation and return into unity. This side of the restless form or of the negativity does not contain the law; as against the law, therefore, appearance is the totality, for it contains the law but more yet, namely the moment of the self-moving form. – *Thirdly*, this shortcoming is manifested in the law in the mere *diversity* at first, and the consequent internal indifference, of its content; the identity of its sides with one another is at first, therefore, only *immediate* and hence *inner*, not yet necessary in other words. In a law two content determinations are *essentially* bound together (for instance, spatial and temporal magnitudes in the law of falling bodies: the traversed spaces vary as the squares of the elapsed times); they *are* bound together; this connection is at first only an immediate one. At first, therefore, it is likewise only a *posited* connection, just as the immediate has obtained in appearance the meaning of positedness in general. The essential unity of the two sides of the law would be their negativity, namely that each contains the other in it; but in the law this essential unity has not yet come the fore. (Thus it is not contained in the concept of the space traversed by a falling body that time corresponds to it as a square. Because the falling is a sensible movement, it is the ratio of space and time; but first, that time refers to space and space to time does not lie in the determination of time itself, that is to say, in time as ordinarily represented; it is said that time can very well be represented without space and space without time; the one thus comes to the other externally, and their external reference to each other is movement. Second, the more particular determination of how the magnitudes further relate to each other in movement is indifferent. The relevant law here is drawn from experience and *is* to this extent *immediate*; there is still required a *proof*, that is, a mediation, in order to know that the law not only *occurs* but is *necessary*; the law as such does not contain this proof and its objective necessity.) The law is, therefore, only the *positive* essentiality of appearance, not its negative essentiality according to which the content determinations are moments of the form, as such pass over

into their other and are in their own selves not themselves but their other. **II.347**
In the law, therefore, although the positedness of the one side of it is the positedness of the other side, the content of the two sides is indifferent to this connection; it does not contain this positedness in it. Law, therefore, is indeed essential form, but not as yet real form which is reflected into its sides as content.

B. THE WORLD OF APPEARANCE AND THE WORLD-IN-ITSELF

1. The concrete existing world tranquilly raises itself to a kingdom of laws; the null content of its manifold determinate being has its subsistence in an other; its subsistence is therefore its dissolution. In this other, however, that which appears also *comes to itself*; thus appearance is in its changing also an enduring, and its positedness is law. Law is this simple identity of appearance with itself; it is, therefore, its substrate and not its ground, for it is not the negative unity of appearance but, as its simple identity, is its immediate unity – the abstract unity, *alongside* which, therefore, its other content *also* occurs. The content is *this content*; it holds together internally, or has its negative reflection inside itself. It is reflected into an other; this other is itself a concrete existence of appearance; the appearing things have their grounds and conditions in other appearing things.

In fact, however, law is also the *other of appearance as appearance*, and its negative reflection as in its other. The content of appearance, which differs from the content of law, is the concrete existent which has negativity for its ground or is reflected into its non-being. But this *other*, which is also a *concrete existent*, is such an existent as likewise reflected into its non-being; it is thus *the same* and that which appears in it is in fact *reflected* not into an other but *into itself*; it is this very reflection of positedness into itself which is law. But as something that appears it is essentially *reflected into its non-being*, or its identity is itself essentially just as much its negativity and its other. The immanent reflection of appearance, law, is therefore not only the identical substrate of appearance but the latter has in law its opposite, and law is its negative unity.

Now through this, the determination of law has been altered within the law itself. At first, law is only a diversified content and the formal reflection of positedness into itself, so that the positedness of one of its sides is the positedness of the other side. But because it is also the negative reflection into itself, its sides behave not only as different but as negatively referring **II.348**
to each other. – Or, if the law is considered just for itself, the sides of its content are indifferent to each other; but they are no less sublated through

their identity; the positedness of the one is the positedness *of the other*; consequently, the subsistence of each is also *the non-subsistence of itself*. This positedness of the one side in the other is their negative unity, and each positedness is *not only the positedness of that side but also of the other*, or each side is itself this negative unity. The positive identity which they have in the law as such is at first only their *inner* unity which stands in need of *proof* and *mediation*, since this negative unity is not yet posited in them. But since the different sides of law are now determined as being different in their negative unity, or as being such that each contains the other within while at the same time repelling this otherness from itself, the identity of law is now also one which is *posited* and *real*.

Consequently, law has likewise obtained the missing moment of the negative form of its sides, the moment that previously still belonged to appearance; concrete existence has thereby returned into itself fully and has reflected itself into its absolute otherness which has determinate being in- and for-itself. That which was previously law, therefore, is no longer only one side of the whole. It is the essential totality of appearance, so that it now obtains also the moment of unessentiality that belonged to the latter – but as reflected unessentiality that has determinate being in itself, that is, as *essential negativity*. – As immediate content, law is *determined* in general, distinguished from other laws, of which there is an indeterminate multitude. But because now it explicitly is essential negativity, it no longer contains that merely indifferent, accidental content determination; its content is rather every determinateness in general, essentially connected together in a totalizing connection. Thus appearance reflected-into-itself is now a *world* that *discloses* itself above the *world of appearance* as *one which is in and for itself*.

The kingdom of laws contains only the simple, unchanging but diversified content of the concretely existing world. But because it is now the total reflection of this world, it also contains the moment of its essenceless manifoldness. This moment of alterability and alteration, reflected into itself and essential, is the absolute negativity or the form in general as such: its moments, however, have the reality of self-subsisting but reflected concrete existence in the world that has determinate being in- and for-itself,
II.349 just as, conversely, this reflected self-subsistence has form in it, and its content is therefore not a mere manifold but a content holding itself together essentially.

– This world which is in and for itself is also called the *suprasensible world*, inasmuch as the concretely existing world is characterized as *sensible*, that is, as one intended for intuition, which is the immediate attitude of

consciousness. – The suprasensible world likewise has immediate, concrete existence, but reflected, essential concrete existence. *Essence* has no immediate existence[14] yet; but it *is*, and in a more profound sense than being; the *thing* is the beginning of the reflected concrete existence; it is an immediacy which is not yet *posited*, not yet essential or reflected; but it is in truth not an immediate *which is simply there*.[15] Things are posited only as the things of another, suprasensible, world – first as true concrete existences, and, second, as the truth in contrast to that which just is. What is recognized in them is that there is a being distinguished from immediate being, and this being is true concrete existence. On the one side, the sense-representation that ascribes concrete existence only to the immediate being of feeling and intuition is in this determination overcome; but, on the other side, also overcome is the unconscious reflection which, although it possesses the representation of *things*, *forces*, *the inner*, and so on, does not know that such determinations are not sensible or immediately existing beings, but reflected concrete existences.

2. The world which is in and for itself is the totality of concrete existence; outside it there is nothing. But, within it, it is absolute negativity or form, and therefore its immanent reflection is *negative* self-reference. It contains opposition, and splits internally as the world of the senses and as the world of otherness or the world of appearance. For this reason, since it is totality, it is also only *one side* of the totality and constitutes in this determination a self-subsistence different from the world of appearance. The world of appearance has its negative unity in the essential world to which it founders and into which it returns as to its ground. Further, the essential world is also the positing ground of the world of appearances; for, since it contains the absolute form essentially, it sublates its self-identity, makes itself into positedness and, as this posited immediacy, it is the world of appearance.

Further, it is not only ground in general of the world of appearance but its *determinate* ground. Already as the kingdom of laws it is a manifold of *content*, indeed the essential content of the world of appearance, and, as ground with content, it is the *determinate ground* of that *other world*. But it is such only according to that content, for the world of appearance still had other and manifold content than the kingdom of laws, because **11.350** the negative moment was still the one peculiarly its own. But because the kingdom of laws now has this moment likewise in it, it is the totality of

[14] "immediate existence" = *Dasein*. [15] "which is simply there" = ein *seiendes*.

the content of the world of appearance and the ground of all its manifoldness. But it is at the same time the negative of this manifoldness and thus a world *opposed* to it. – That is to say, in the identity of the two worlds, because the one world is determined according to form as the essential and the other as the same world but posited and unessential, the *connection of ground* has indeed been restored. But it has been restored as the *ground-connection of appearance*, namely as the connection, not of the two sides of an identical content, nor of a mere diversified content, like law, but as total connection, or as negative identity and *essential connection of the opposed sides of the content*. – The kingdom of laws is not only this, that the positedness of a content is the positedness of an other, but rather that this identity, as we have seen,[16] is essentially also negative unity, and in this negative unity each of the two sides of law is *in it*, therefore, *its other* content; consequently, the other is not an other in general, indeterminedly, but is *its* other, equally containing the content determination of that other; and thus the two sides are opposed. Now, because the kingdom of laws now has in it this negative moment, namely opposition, and thus, as totality, splits into a world which exists in and for itself and a world of appearance, the identity of these two is the *essential connection of opposition*. – The connection of ground is, as such, the opposition which, in its contradiction, has foundered to the ground; and concrete existence is the ground that has come to *itself*. But concrete existence becomes appearance; ground is sublated in concrete existence; it reinstates itself as the return of appearance into itself, but does so as sublated ground, that is to say, as the ground-connection of opposite determinations; the identity of such determinations, however, is essentially a becoming and a transition, no longer the connection of ground as such.

The world that exists in and for itself is thus itself a world distinguished within itself, in the total compass of a manifold content. That is to say, it is identical with the world of appearance or the posited world and to this extent it is its ground. But its identity connection is at the same time determined as opposition, because the form of the world of appearance is reflection into its otherness and this world of appearance, therefore, in the world that exists in and for itself has truly returned into itself, in such a manner that that other world is its opposite. Their connection is, therefore, specifically this, that the world that exists in and for itself is the *inversion* of the world of appearance.

[16] Cf. above, 11.348.

C. THE DISSOLUTION OF APPEARANCE

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The world that exists in and for itself is the *determinate* ground of the world of appearance and is this only in so far as, within it, it is the negative moment and hence the totality of the content determinations and their alterations that correspond to that world of appearance, yet constitutes at the same time its completely opposed side. The two worlds thus relate to each other in such a way that what in the world of appearance is positive, in the world existing in and for itself is negative, and, conversely, what is negative in the former is positive in the latter. The north pole in the world of appearance is the south pole *in and for itself*, and *vice-versa*; positive electricity is *in itself* negative, and so forth. What is evil in the world of appearance is *in and for itself* goodness and a piece of good luck.[P]

In fact it is precisely in this opposition of the two worlds that *their difference* has disappeared, and what was supposed to be the world existing in and for itself is itself the world of appearance and this last, conversely, the world essential within. – The *world of appearance* is in the first instance determined as reflection into otherness, so that its determinations and concrete existences have their ground and subsistence in an other; but because this other, as other, is likewise *reflected into an other*, the other to which they both refer is one which sublates itself as other; the two consequently refer *to themselves*; the world of appearance is *within it*, therefore, law equal to itself. – Conversely, the world existing in and for itself is in the first instance self-identical content, exempt from otherness and change; but this content, as complete reflection of the world of appearance into itself, or because its diversity is difference reflected into itself and absolute, consequently contains negativity as a moment and self-reference as reference to otherness; it thereby becomes self-opposed, self-inverting, essenceless content. Further, this content of the world existing in and for itself has thereby also retained the form of *immediate concrete existence*. For it is at first the ground of the world of appearance; but since it has opposition in it, it is equally sublated ground and immediate concrete existence.

Thus the world of appearance and the essential world are each, each within it, the totality of self-identical reflection and of reflection-into-other, or of being-in-and-for-itself. They are both the self-subsisting wholes **II.352** of concrete existence; the one is supposed to be only reflected concrete existence, the other immediate concrete existence; but each *continues* into the other and, within, is therefore the identity of these two moments.

[P] See *Phenomenology of Spirit*, pp. 96ff. GW 9, 96–98.

What we have, therefore, is this totality that splits into *two* totalities, the one *reflected* totality and the other *immediate* totality. Both, in the first instance, are self-subsistent; but they are this only as totalities, and this they are inasmuch as each essentially contains the moment of the other in it. Hence the distinct self-subsistence of each, one determined as *immediate* and one as *reflected*, is now so posited as to be essentially the reference to the other and to have its self-subsistence *in this unity of the two*.

We started off from the *law of appearance*; this law is the identity of a content and another content different from it, so that the positedness of the one is the positedness of the other. Still present in law is this difference, that the identity of its sides is at first only an internal identity which the two sides do not yet have in them. Consequently the identity is, for its part, not realized; the content of law is not identical but indifferent, diversified. This content, therefore, is on its side only *in itself* so determined that the positedness of the one is the positedness of the other; this determination is not yet present in it. But now *law is realized*; its inner identity is existent at the same time and, conversely, the content of law is raised to ideality; for it is sublated within, is reflected into itself, for each side has the other in it, and therefore is truly identical with it and with itself.

Thus is law *essential relation*. The truth of the unessential world is at first a world in and for itself and *other to it*; but this world is a totality, for it is itself and the first world; both are thus immediate concrete existences and consequently reflections in their otherness, and therefore equally truly reflected into themselves. "World" signifies in general the formless totality of a manifoldness; this world has foundered both as essential world and as world of appearance; it is still a totality or a universe but as *essential relation*. Two totalities of content have arisen in appearance; at first they are determined as indifferently self-subsisting *vis-à-vis* each other, each having indeed form within it but not with respect to the other; this form has however demonstrated itself to be their connecting reference, and the essential relation is the consummation of their unity of form.

CHAPTER 3

The essential relation

II.353

The truth of appearance is the *essential relation*. Its content has immediate self-subsistence: the *existent* immediacy and the *reflected* immediacy or the self-identical reflection. In this self-subsistence, however, it is at the same time a relative content; it is simply and solely as a reflection into its other, or as unity of the reference with its other. In this unity, the self-subsistent content is something posited, sublated; but precisely this unity is what constitutes its essentiality and self-subsistence; this reflection into an other is reflection into itself. The relation has sides, since it is reflection into an other; so its difference is internal to it, and its sides are independent subsistence, for in their mutually indifferent diversity they are thrown back into themselves, so that the subsistence of each equally has its meaning only in its reference to the other or in the negative unity of both.

The essential relation is therefore not yet the true *third* to *essence* and to *concrete existence* but already contains the determinate union of the two. Essence is realized in it in such a way that it has self-subsistent, concrete existents for its subsistence, and these concrete existents have returned from their indifference back into their essential unity so that they have only this unity as their subsistence. Also the reflective determinations of positive and negative are reflected into themselves only as each is reflected into its opposite; but they have no other determination besides this their negative unity, whereas the essential relation has sides that are posited as self-subsistent totalities. It is the same opposition as that of positive and negative, but it is such as an inverted world. The side of the essential relation is a totality which, however, essentially has an opposite or a *beyond*; it is only appearance; its concrete existence, rather than being its own, is that of its other. It is, therefore, something internally fractured; but this, its sublated being, consists in its being the unity of itself and its other, therefore a whole, and precisely for this reason it has self-subsistent concrete existence and is essential reflection into itself.

This is the *concept* of relation. At first, however, the identity it contains is
11.354 not yet perfect; the totality which each relative is as relative, is only an inner one; the side of the relation is posited at first in *one* of the determinations of negative unity; what constitutes the form of the relation is the specific self-subsistence of each of the two sides. The identity of the form is therefore only a *reference*, and the self-subsistence of the sides falls outside it, that is to say, it falls in the sides; we still do not have the reflected unity of the identity of the relation and of the self-subsistent concrete existents; we still do not have *substance*. – It follows that the concept of relation has indeed shown itself to be the unity of reflected and immediate self-subsistence. But it is this *concept* still *immediately* at first; immediate are therefore its moments *vis-à-vis* each other, and immediate is the unity of the reference connecting them essentially – a unity this, which only then is the true unity that conforms to the concept, when it has realized itself, that is to say, through its movement has *posited* itself as this unity.

The essential relation is therefore immediately the relation of the *whole* and the *parts* – the reference of reflected and immediate self-subsistence, so that both are at the same time mutually conditioning and presupposing.

In this relation, neither of the sides is yet posited as moment of the other; their identity is therefore itself one side, or not their negative unity. Hence, *secondly*, the relation passes over into one in which one side is the moment of the other and is present there as in its ground, the true self-subsistent element of both. This is the relation *of force and its expression*.

Third, the inequality still present in this reference sublates itself, and the final relation is that of *inner* and *outer*. – In this difference, which has now become totally formal, relation itself founders, and *substance* or *actuality* come on the stage as the *absolute* unity of immediate and reflected concrete existence.

A. THE RELATION OF WHOLE AND PARTS

First, the essential relation contains the self-subsistence of concrete existence *reflected into itself*; it is then the *simple form* whose determinations are indeed also concrete existences, but they are posited at the same time, moments held in the unity. This self-subsistence reflected into itself is at the same time reflection into its opposite, namely the *immediate* self-subsistence, and
11.355 its subsistence is this identity with its opposite no less than its own self-subsistence. – *Second*, the other side is thereby also immediately posited. This is the immediate self-subsistence which, determined as the *other*, is in itself a multifarious manifold, but in such a way that this manifold *also*

essentially has within it the reference of the other side, the unity of the reflected self-subsistence. That one side, the *whole*, is the self-subsistence that constitutes the world existing in and for itself; the other side, *the parts*, is the immediate concrete existence which was the world of appearance. In the relation of whole and parts, the two sides are these self-subsistences but in such a way that each has the other reflectively shining in it and, at the same time, only is as the identity of both. Now because the essential relation is at first only the first, immediate relation, the negative unity and the positive self-subsistence are bound together by the "also"; the two sides are indeed both posited as *moments*, but *equally so* as concretely existing *self-subsistences*. – Their being posited as moments is henceforth so distributed that the *whole*, the reflected self-subsistence, is as concrete self-existent first, and the other, the immediate, is in it as a moment. – The *whole* constitutes here the unity of the two sides, the *substrate*, and the immediate concrete existence is as *positedness*. – Conversely, on the other side which is the side of the parts, the immediate and internally manifold concrete existence is the self-subsistent substrate; the reflected unity, the whole, is on the contrary only external reference.

2. This relation thus contains the self-subsistence of the sides, and their sublatedness no less, and the two simply in one reference. The whole is the self-subsistent; the parts are only moments of this unity, but they are also equally self-subsistent and their reflected unity is only a moment; and each is, in its *self-subsistence*, simply the *relative* of an other. This relation is within it, therefore, immediate contradiction, and it sublates itself.

On closer inspection, the *whole* is the reflected unity that stands independently on its own; but this subsistence that belongs to it is equally repelled by it; it is thus self-externalized; it has its *subsistence* in its opposite, in the manifold immediacy, *the parts*. *The whole thus consists of the parts*, and apart from them it is not anything. It is therefore the whole relation and the self-subsistent totality, but, for precisely this reason, it is only a relative, for what makes it a totality is rather its *other*, the parts; it does not have its subsistence within it but in its other.

The parts, too, are likewise the whole relation. They are the immediate *as against* the reflected self-subsistence, and do not subsist in the whole but are for themselves. Further, they have this whole within them as their moment; the whole constitutes their connecting reference; without the whole there are no parts. But because they are the self-subsistent, this connection is only an external moment with respect to which they are in and for themselves indifferent. But at the same time the parts, as manifold concrete existence, **11.356**

collapse together, for this concrete existence is reflectionless being; they have their self-subsistence only in the reflected unity which is this unity as well as the concrete existent manifoldness; this means that they have self-subsistence only *in the whole*, but this whole is at the same time the self-subsistence which is the *other* to the parts.

The whole and the parts *thus reciprocally* condition each other; but the relation here considered is at the same time higher than the reference of *conditioned* and *condition* to each other as earlier determined.[17] Here this reference is *realized*, that is to say, it is *posited* that the condition is the essential self-subsistence of the conditioned in such a manner that it is *presupposed* by the latter. The condition as such is only the *immediate*, and it is only *implicitly presupposed*. But the whole, through the condition of the parts, itself immediately entails that it, too, is only in so far as it has the parts for presupposition. Thus, since both sides of the relation are posited as conditioning each other reciprocally, each is on its own an immediate self-subsistence, but their self-subsistence is equally mediated or posited through the other. The *whole relation*, because of this reciprocity, is the turning back of the conditioning into itself, the non-relative, the *unconditioned*.

Now inasmuch as each side of the relation has its self-subsistence not in it but in its other, what we have is only one identity of the two in which they are both only moments; but inasmuch as each is self-subsistent on its own, the two are two self-subsistent concrete existences indifferent to each other.

In the first respect, that of the essential identity of the two sides, *the whole is equal to the parts and the parts are equal to the whole*. Nothing is in the whole which is not in the parts, and nothing is in the parts which is not in the whole. The whole is not an abstract unity but the unity of a *diversified manifoldness*; but this unity within which the *manifold* is held together is the *determinateness* by virtue of which the latter is the parts. The relation has, therefore, an indivisible identity and only one self-subsistence.

But further, the whole is equal to the parts but not to *them* as parts; the whole is the reflected unity whereas the parts constitute the determinate
11.357 moment or the *otherness* of the unity and are the diversified manifold. The whole is not equal to them as this self-subsistent diversity but to them *together*. But this, their "together," is nothing else but their unity, the whole as such. In the parts, therefore, the whole is only equal to

[17] Cf. above, 11.324–325.

itself, and the equality of it and the parts expresses only this tautology, namely that *the whole as whole is equal* not to the parts but to *the whole*.

Conversely, the parts are equal to the whole; but because, as parts, they are the moment of otherness, they are not equal to it as the unity, but in such a way that *one* of the whole's manifold determinations maps over a part, or that they are equal to *the whole as manifold*, and this is to say that they are equal to it as an *apportioned whole*, *that is*, *as parts*. Here we thus have the same tautology, that the *parts as parts* are equal *not to the whole as such but*, *in the whole*, *to themselves*.

The whole and the parts thus fall indifferently apart; each side refers only to itself. But, as so held apart, they destroy themselves. The whole which is indifferent towards the parts is *abstract identity*, undifferentiated in itself. Identity is a whole only inasmuch as it is *differentiated in itself*, so differentiated indeed that the manifold determinations are reflected into themselves and have immediate self-subsistence. And the identity of reflection has shown through its movement that it has this *reflection into its other* for its truth. – In just the same way are the parts, as indifferent to the unity of the whole, only the unconnected manifold, *the inherently other* which, as such, is the other of itself and only sublates itself. – This self-reference of each of the two sides is their self-subsistence; but this self-subsistence which each side has *for itself* is rather the negation of their respective selves. Each side has its self-subsistence, therefore, not within but in the other side; this other, which constitutes the subsistence, is its presupposed immediate which is *supposed to be* the first and its starting point; but this first of each side is itself only a first which is not first but has its beginning in its other.

The truth of the relation consists therefore *in the mediation*; its essence is the negative unity in which both the reflected and the existent immediacy are equally sublated. The relation is the contradiction that returns to its ground, into the unity which, as turning back, is reflected unity but which, since it has equally posited itself as sublated, refers to itself negatively and makes itself into existent immediacy. But this unity's negative reference, in so far as it is a first and an immediate, only is as mediated by its other and equally as posited. This other, the existent immediacy, is equally only as sublated; its self-subsistence is a first, but only in order to disappear, and it **II.358** has an existence which is posited and mediated.

Determined in this way, the relation is no longer one of *whole* and *parts*. The previous immediacy of its sides has passed over into positedness and mediation. Each side is posited, in so far as it is immediate, as

self-sublating and as passing over into the other; and, in so far as it is itself negative reference, it is at the same time posited as conditioned through the other, as through its positive. And the same applies to the immediate transition of each; it is equally a mediation, a sublating which is posited through the other. – Thus the relation of whole and parts has passed over into the relation of *force and its expressions*.

Remark

The antinomy of the infinite divisibility of matter was examined above (Section I, pp. 138ff.)[18] in connection with the concepts of quantity. Quantity is the unity of continuity and discreteness; it contains in the *self-subsistent* one its *confluence* with others, and in this uninterrupted *continuing* self-*identity* it equally contains *the negation of it*. Inasmuch as the immediate connection of these moments of quantity finds expression in the essential relation of whole and parts – the one of quantity being *part*, and its *continuity* the *whole* which is composed of parts – the antinomy consists in the contradiction that was incurred, and was resolved, in conjunction with the relation of whole and parts. – For whole and parts are just as essentially related to one another and constitute only one identity as they are indifferent to each other, having independent subsistence. The relation, therefore, is this antinomy: that the one moment, in freeing itself from the other, immediately brings about this other.

The concrete existent, then, determined as a whole, has parts, and these constitute its subsistence; the unity of the whole is a posited connection, an external *composition* which is extraneous to the self-subsistent concrete existent. Now if such a concrete existent is a part, then it is not the whole, is not composed, hence is *a simple*. But the reference to the whole is external to it and therefore extraneous. It follows that the self-subsistent, in itself, is also not a part, for it is a part only by virtue of that connecting reference.
11.359 But now, since it is not part, it is a whole, for this relation of whole and parts is the only one that there is and the self-subsistent is one of the two. But as a whole, it is again composed; it again consists of parts and *so on to infinity*. – This infinity consists in nothing else but the perennial alternation of the two determinations of the relation, in each of which the other immediately arises, so that the positedness of one is the disappearing of itself. Determined as a whole, matter consists of parts and in these the whole becomes an unessential connection; it disappears. But a part, thus

[18] Hegel is referring to the 1812 edition (cf. GW 11, 113ff.). For the corresponding text in the 1832 edition, cf. 21.179ff.

taken on its own, is also not a part but the whole. – The antinomy of this inference, on close inspection, is really this: Since the whole is not what subsists on its own, the part is the self-subsistent; but since the latter is self-subsistent only *without the whole*, it is then self-subsistent *not* as a part but rather *as a whole*. The infinitude of the ensuing progress is the incapacity to bring together the two thoughts which this mediation entails, namely that each of the two determinations, by virtue of its self-subsistence and separation from the other, passes over into non-self-subsistence and into the other.

B. THE RELATION OF FORCE AND ITS EXPRESSION

Force is the negative unity into which the contradiction of whole and parts has resolved itself; it is the truth of that first relation. That of whole and parts is the thoughtless relation which the understanding first happens to come up with; or, objectively speaking, it is a dead mechanical aggregate that indeed has form determinations and brings the manifoldness of its self-subsisting matter together into one unity; but this unity is external to the manifoldness. – But the relation of *force* is the higher immanent turning back in which the unity of the whole that made up the connection of the self-subsisting otherness ceases to be something external and indifferent to this manifoldness.

In the essential relation as now determined, the immediate and the reflected self-subsistence are now posited in that manifoldness as sublated or as moments, whereas in the preceding relation they were self-subsisting sides or extremes. In this there is contained, *first*, that the reflected unity and its immediate existence, in so far as they are both first and immediate, sublate themselves and pass over into their other: the former, *force*, passes over into its expression, and what is expressed is a disappearing something that returns into force as its ground and only exists as supported and **11.360**
posited by it. *Second*, this transition is not only a becoming and a disappearing but is rather negative reference to itself; that is, *that which alters its determination* is in this altering reflected-into-itself and preserves itself; the movement of force is not as much a *transition* as a *translation*, and in this alteration posited through itself it remains what it is. – *Third*, this *reflected*, self-referring unity is itself also sublated and a moment; it is mediated through its other and it has this as *condition*; its negative self-reference, which is a first and begins the movement of the transition *out of itself*, has equally a presupposition by which it is *solicited*, and an other from which it begins.

a. The conditionedness of force

Considered in its closer determinations, force contains, *first*, the moment of existing immediacy; it itself is determined over against this immediacy as negative unity. But this unity, in the determination of immediate being, is an *existing something*. This something appears as a first, since as an immediate it is negative unity; force, on the contrary, since it is a reflected something, appears as positedness and to this extent as pertaining to the existing thing or to a matter. Not that force is the *form* of this thing and the thing is determined by it; on the contrary, the thing is as an immediate indifferent to it. – As so determined, there is no ground in the thing for having a force; force, on the other hand, since it is the side of positedness, presupposes the thing essentially. If it is therefore asked, how the thing or matter happens to *have* a force, the latter appears as externally connected to it and *impressed* upon the thing by some alien power.

As this immediate subsistence, force is a *quiescent determinateness of the thing* in general; not anything that expresses itself but something immediately external. Hence force is also designated as matter, and instead of a magnetic force, and an electric force, and other such forces, a magnetic matter, an electric matter, and so on, are assumed; or again, instead of the renowned *force of attraction*, a fine *ether* is assumed that holds everything together. – These are the matters, which we considered above,[19] into which the inert, powerless negative unity of the thing dissolved itself.

But force contains immediate concrete existence as a moment, one which, though a condition, is transient and self-sublating; it contains it, therefore, not as a concretely existing thing. Further, it is not negation as
11.361 determinateness, but negative unity reflected into itself. Consequently, the thing where the force was supposed to be no longer has any significance here; the force itself is rather the positing of the externality that appears as concrete existence. It also no longer is, therefore, merely a determinate matter; such self-subsistence has long since passed over into positedness and appearance.

Second, force is the unity of reflected and immediate subsistence, or of form-unity and external self-subsistence. It is both in one; it is the contact of sides of which one is in so far as the other is not, self-identical positive reflection and negated reflection. Force is thus self-repelling contradiction; it is *active*; or it is self-referring negative unity in which the reflected immediacy or the essential in-itselfness is posited as being only as sublated or as

[19] Cf. above, 11.334.

a moment, and consequently, in so far as it distinguishes itself from immediate concrete existence, as passing over into it. Force, as the determination of the reflected unity of the whole, is thus posited as becoming concretely existent external manifoldness *from out of itself*.

But, *third*, force is activity at first only *in principle* and immediately; it is reflected unity, and just as essentially the *negation of it*; inasmuch as it differs from this unity, but is only the identity of itself and its negation, it essentially refers to this identity as an immediacy external to it and one which it has as *presupposition* and *condition*.

Now this presupposition is not a thing standing over against it; in force any such indifferent self-subsistence is sublated; as the condition of force, the thing is *a self-subsistent other to it*. But because it is not a thing, and the self-subsistent immediacy has on the contrary attained here the determination of self-referring negative unity, *the self-subsistent other is itself a force*. – The activity of force is conditioned through itself as through an other to itself, through a force.

Accordingly, force is a relation in which each side is the same as the other. They are forces that stand in relation, and refer to each other essentially. – Further, they are different at first only in general; the unity of their relation is at first one which is *internal and exists only implicitly*. The conditionedness of a force through another force is thus the doing of the force itself *in itself*; that is, the force is at first a positing act as *pre*-supposing, an act that only negatively refers to *itself*; the other force still lies *beyond its positing* activity, namely the reflection that in its determining immediately *returns into itself*. **11.362**

b. The solicitation of force

Force is conditioned because the moment of immediate concrete existence which it contains is something only *posited*, but, because it is at the same time an immediate, is posited as something *presupposed* in which the force negates itself. Accordingly, the externality which is present to force *is its own activity of presupposing* posited at first as *another force*.

This *presupposing* is moreover reciprocal. Each of the two forces contains the unity reflected into itself as sublated and is therefore a presupposing; it posits itself as external; this moment of externality is *its own*; but since it is equally a unity reflected into itself, it posits that externality at the same time *not within itself* but as another force.

But the external as such is self-sublating; further, the activity that reflects itself into itself essentially refers to that externality as to its other, but

equally to it as to *something which is null in itself* and *identical with it*. Since the presupposing activity is equally immanent reflection, it sublates that external negation, and *posits* it as something external to it, or as *its* externality. Thus force, as conditioning, is reciprocally a *stimulus* for the other force against which it is active. The attitude of each force is not one of passive determination, as if something other than it were thereby being elicited in it; the stimulus rather only *solicits* it. The force is within it the negativity of itself, the repelling of itself from itself is its own positing. Its act, therefore, consists in sublating the externality of the stimulus, reducing it to just a stimulus and positing it as its own repelling of itself from itself, as *its own expression*.

The force that expresses itself is thus the same as what was at first a presupposing activity, that is, one which makes itself external; but, as self-expressive, force also negates externality and *posits* it as its own activity. Now in so far as in this examination we start from force as the negative unity of itself, and consequently as presupposing reflection, this is the same as when, in the expression of force, we start from the soliciting stimulus. Thus force is *in its concept* at first determined as self-sublating identity, and *in its reality* one of the two forces is determined as soliciting and the other as being solicited. But the concept of force is as such the identity of positing and presupposing reflection, or of reflected and immediate unity, and each of these determinations is simply a moment, in unity, and consequently is as mediated through the other. But, equally so, there is nothing in the
11.363 two forces thus alternately referring to each other that determines which would be the soliciting and which the solicited, or rather, both of these form determinations belong to each in equal manner. And this identity is not just one of external comparison but an essential unity of the two.

Thus one force is determined first as *soliciting* and the other as *being solicited*; these determinations of form appear in this guise as two differences present in the forces immediately. But they are essentially mediated. The one force is solicited; this stimulus is a determination posited in it *from outside*. But the force is itself a presupposing; it essentially reflects into itself and sublates the fact that the stimulus is something external. That it is solicited is thus its own doing, or, it is through its own determining that the other force is an other force in general and the one soliciting. The soliciting force refers to the other negatively and so sublates its externality and is positing; but it is this positing only on the presupposition that it has an other over against it; that is to say, it is itself soliciting only to the extent that it has an externality in it, and hence to the extent that it is solicited. Or it is soliciting only to the extent that it is solicited to be soliciting. And

so, conversely, the first is solicited only to the extent that it itself solicits the other to solicit it, that is, the first force. Each thus receives the stimulus from the other; but the stimulus that each delivers as active consists in receiving a stimulus from the other; the stimulus which it receives is solicited by itself. Both, the given and the received stimulus, or the active expression and the passive externality, are each, therefore, nothing immediate but are mediated: indeed, each force is itself the determinateness which the other has over against it, is mediated through this other, and this mediating other is again its own determining positing.

This then – that a force happens to incur a stimulus through another force; that it therefore behaves *passively* but then again passes over from this passivity into activity – this is the turning back of force into itself. Force expresses *itself*. The external expression is a reaction in the sense that it posits the externality as its own moment and thus sublates its having been solicited through an other force. The two are therefore one: the expression of the force by virtue of which the latter, through its negative activity which is directed at itself, imparts a determinate being-for-other to itself; and the infinite turning in this externality back to itself, so that there it only refers to itself. The presupposing reflection, to which belong the conditionedness and the stimulus, is therefore immediately also the reflection that returns **II.364** into itself, and the activity is essentially reactive, *against itself*. The positing of the stimulus or the external is itself the sublation of it, and, conversely, the sublation of the stimulus is the positing of the externality.

c. The infinity of force

Force is *finite* inasmuch as its moments still have the form of immediacy. In this determination its presupposing and its self-referring reflection are different: the one appears as an external self-subsisting force and the other as passively referring to it. Force is thus still conditioned according to form, and according to content likewise still restricted, for a determinateness of form still entails a restriction of content. But the activity of force consists in *expressing itself*; that is, as we have seen, in sublating the externality and determining it as that in which it is identical with itself. What force truly expresses, therefore, is that its reference to an other is its reference to itself; that its passivity consists in its activity. The stimulus by virtue of which it is solicited to activity is its own soliciting; the externality that comes to it is nothing immediate but something mediated by it, just as its own essential self-identity is not immediate but is mediated by virtue of its negation. In brief, force expresses this, that its *externality is identical with its inwardness*.

C. RELATION OF OUTER AND INNER

1. The relation of whole and parts is the immediate relation; in it, therefore, reflected and existent immediacy have a self-subsistence of their own. But now, since they stand in essential relation, their self-subsistence is their negative unity, and this is now posited in the expression of force; the reflected unity is essentially a becoming-other, the unity's translation of itself into externality; but this externality is just as immediately taken back into that unity; the difference of the self-subsisting forces sublates itself; the expression of force is only a mediation of the reflected unity with itself. What is present is only an empty and transparent difference, a reflective shine, but this shine is the mediation which is precisely the independent subsistence. What we have is not just opposite determinations openly sublating themselves, and their movement is not only a transition;
11.365 rather, what we have is both that the immediacy from which the start and the transition into otherness were made is itself only posited, and that, consequently, each of the determinations is already in its immediacy the unity with its other, so that the transition equally is a self-positing turning back into itself.

The *inner* is determined as the form of *reflected immediacy* or of essence over against the *outer* as the form of *being*; the two, however, are only one identity. – This identity is, *first*, the sustaining unity of the two as substrate replete of content, or the *absolute fact* with respect to which the two determinations are indifferent, external moments. To this extent, it is content and totality, a totality which is an inner that has equally become an outer but, in this outer, is not something-that-has-become or something-that-has-been-left-behind but is self-equal. The outer, in this determination, is not only equal to the inner according to content but the two are rather only *one fact*. – But this fact, as *simple identity* with itself, is different from *its form determinations*, or these determinations are external to it; it is itself, therefore, an inner which is different from its externality. But this externality consists in the two determinations, the inner and the outer, both constituting it. But the fact is itself nothing other than the unity of the two. Again, therefore, the two sides are the same according to content. But in the fact they are as self-penetrating identity, as substrate full of content. But in the externality, as forms of the fact, they are indifferent to that identity and consequently each is indifferent to the other.

2. They are in this wise the different form determinations that have an identical substrate, not in them but in an other. These are determinations of reflection which are each for itself: the inner, as the form of immanent

reflection, the form of essentiality; the outer, as the form instead of immediacy reflected into an other, or the form of unessentiality. But the nature of relation has shown that these determinations constitute just one identity alone. In its expression force is a determining which is one and the same as presupposing and as returning into itself. Inasmuch as the inner and the outer are considered as determinations of form, they are, therefore, *first*, only the simple form itself, and, *second*, because in this form they are at the same time determined as opposite, their unity is the pure *abstract determination* in which the one is *immediately* the other, and is this other *because* it is the one that it is. Thus the inner is immediately *only* the outer, and it is this *determinateness of externality* for the reason that it is the inner; conversely, the outer is *only* an inner because it is *only* an outer. – In other words, since the unity of form holds its two determinations as opposites, their identity is only this transition, and is in this transition only the other of both, not their identity *replete with content*. Or this holding fast to form is in general the side of *determinateness*. What is determined according to **11.366** this side is not the real totality of the whole but the totality or the fact itself only in the *determinacy* of form; since this unity is simply the coincidence of two opposed determinations, then when one of them is taken first (it is indifferent which), it must be said of the substrate or the fact that it is *for this reason* just as essentially in the other determinateness, but also *only* in the other, just as it was first said that it is *only* in the first. –

Thus something which *is at first only an inner*, is for just that reason *only* an outer. Or conversely something which is *only an outer*, is for that reason *only* an inner. Or if the inner is determined as *essence* but the outer as *being*, then inasmuch as a fact is only in its *essence*, it is for that very reason only an immediate *being*; or a fact which only *is*, is for that very reason as yet only in its *essence*. – Outer and inner are determinateness so posited that each, as a determination, not only presupposes the other and passes over into it as its truth, but, in being this truth of the other, remains *posited as determinateness* and points to the totality of both. – The *inner* is thus the completion of *essence* according to form. For in being determined as inner, essence implies that it is deficient and that it is only with reference to its other, the outer; but this other is not just being, or even concrete existence, but *is* the reference to essence or the inner. What we have here is not just the reference of the two to each other, but the determining element of absolute form, namely that each term is immediately its opposite, and each is their common reference *to a third* or rather *to their unity*. Their mediation, however, still misses this identical substrate that contains them both; their reference is for this reason the immediate conversion of the one

into the other, and this negative unity tying them together is the simple point empty of content.

Remark

The movement of essence is in general the *coming to be of the concept*. In the relation of inner and outer the essential moment of the concept comes on stage, namely that its determinations are so posited in negative unity that each not only is its other immediately, but is also the totality of the whole. In the concept as such, however, this totality is the *universal* – a substrate
11.367 which is still absent in the relation of inner and outer. – Also missing in the negative unity of inner and outer which is the *immediate conversion* of the one determination into the other is that substrate which we have called the "fact."

The immediate *identity of form* as has been posited here, still without the rich content of the movement of the fact itself, merits close attention. It occurs in the fact as the latter is at its *beginning*. Thus *pure being* is immediately *nothing*. Quite in general, everything real is at its beginning only an immediate identity of this sort, for at this stage it has not yet opposed and developed its moments: on the one hand, it has not yet *inwardly recollected* itself from externality; on the other, it has not yet *relinquished* its inwardness, not yet produced itself out of it. It is, therefore, the inner only as *determinateness* against the outer, and the outer only as *determinateness* against the inner. Hence it is partly *only* an immediate being; and partly, since it is equally the negativity which will be the activity of development, is as such still essentially *only* an inner. – This is manifest, quite in general, in every natural, scientific, and spiritual development, and it is essential to recognize that because something is at first only an *inner* or also in its *concept*, as a first it is for that reason only its immediate passive existence. Thus – just to take the nearest example – the *essential relation* now under consideration, before going through the mediation of the relation of *force* and thus realizing itself, is relation only *in itself*, is the concept of relation, or relation only *implicitly*. But for that reason it is *only* the *external*, immediate relation, the relation of *whole* and *parts* in which the sides have indifferent subsistence *vis-à-vis* each other. Their identity is not yet explicit in them; it is *implicit* at first, and for this reason they fall apart; they have an immediate, external subsistence. – Thus the *sphere of being* is in general only the absolutely still *inner* and for this reason the sphere of existent immediacy or of externality. – *Essence* [or *Wesen* in German] is only the *inner* at first; hence it is also taken for a totally *external* and unsystematic common element; one speaks [in German] of *Schulwesen*, *Zeitungswesen*, that is, of public instruction, of the press, and

understands by it a common something made up of existing objects externally assembled together, with no essential bond or organization. – Or, with regard to concrete objects, the seed of a plant is at first only *inner* plant, or the child only *implicitly* human. But this is why the plant or the human being is, as germ, an immediate, something external which has not yet given itself negative self-reference, is *something passive*, the *prey* to otherness. – Also *God*, in his *immediate* concept, is not spirit; spirit is not an immediate, is not opposed to mediation, but is essence eternally positing its immediacy and eternally returning from it back into itself. *Immediately*, therefore, God is *only* nature. Or, nature is God *only* as the inner God, not the God who **11.368**
is actual as spirit, and hence is not the true God. – Or, as thought, as *first* thought, God is only the pure being, or also essence, the abstract absolute; but not God as absolute spirit, which alone is the true nature of God.

3. The *first* of the identities considered, the identity of inner and outer, is the substrate which is indifferent to the difference of these determinations as to a form external to it, or the identity is as *content*. The *second* is the unmediated identity of their difference, the immediate conversion of each into its opposite, or it is inner and outer as pure *form*. But both these identities are only *the sides of one totality*, or the totality itself is only the conversion of the one identity into the other. The totality, as substrate and content, is this immediacy reflected into itself only through the presupposing reflection of form that sublates their difference and posits itself as indifferent identity, as reflected unity over against it. Or again, the content is the form itself in so far as the latter determines itself as difference and makes itself into one side of this difference as externality, but into the other side as an immediacy which is reflected into itself, or into an inner.

It follows that, conversely, the differences of form, the inner and the outer, are each posited as the totality within it of itself and its other; the *inner*, as simple identity reflected into itself, is immediacy and hence, no less than essence, being and externality; and the *external*, as the manifold and determined being, is only external, that is, is posited as unessential and as having returned into its ground, therefore as inner. This transition of each into the other is their immediate identity, as substrate, but also their mediated identity, that is, each is what it is in itself, the totality of the relation, precisely through its other. Or, conversely, the determinateness of either side is mediated through the determinateness of the other because each is in itself the totality; the totality thus mediates itself with itself through the form or the determinateness, and the determinateness mediates itself with itself through its simple identity.

Therefore, what something is, that it is entirely in its externality; its externality is its totality and equally so its unity reflected into itself. Its appearance is not only reflection-into-other but immanent reflection, and its externality is therefore the expression of what it is in itself; and since its content and its form are thus absolutely identical, it is, in and for itself, nothing *but this*: *to express itself*. It is the revealing of its essence, and this essence, accordingly, consists simply in being self-revealing.

The essential relation, in this identity of appearance with the inner or with essence, has determined itself as *actuality*.

SECTION III

Actuality

II.369

Actuality is the *unity of essence and concrete existence*; in it, *shapeless* essence and *unstable* appearance – or subsistence without determination and manifoldness without permanence – have their truth. Although concrete existence is the immediacy that has proceeded from ground, it still does not have form explicitly posited in it; inasmuch as it determines and informs itself, it is *appearance*; and in developing this subsistence that otherwise only is a reflection-into-other into an immanent reflection, it becomes *two worlds*, *two totalities of content*, one determined as *reflected into itself* and the other as *reflected into other*. But the essential relation exposes the formality of their connection, and the consummation of the latter is the *relation of the inner and the outer* in which the content of both is equally only one *identical substrate* and only *one identity of form*. – Because this identity has come about also in regard to form, the form determination of their difference is sublated, and that they are *one* absolute totality is *posited*.

This unity of the inner and outer is *absolute actuality*. But this actuality is, *first*, the absolute as such – in so far as it is posited as a unity in which the form has sublated itself, making itself into the *empty or external distinction* of an outer and inner. *Reflection* relates to this absolute as *external to it*; it only contemplates it rather than being its own movement. But it is essentially this movement and is, therefore, as the absolute's negative turning back into itself.

Second, it is *actuality* proper. *Actuality*, *possibility*, and *necessity* constitute *the formal moments* of the absolute, or its reflection.

Third, the unity of the absolute and its reflection is the *absolute relation*, or rather the absolute as relation to itself, *substance*.

CHAPTER I

11.370

The absolute

The simple solid identity of the absolute is indeterminate, or rather, every determinateness of *essence* and *concrete existence*, or of *being* in general as well as of *reflection*, has dissolved itself into it. Accordingly, the *determining of what is the absolute* appears to be a negating, and the absolute itself appears only as the negation of all predicates, as the void. But since it must equally be spoken of as the position of all predicates, it appears as the most formal of contradictions. In so far as that negating and this positing belong to *external reflection*, what we have is a formal, unsystematic dialectic that has an easy time picking up a variety of determinations here and there, and is just as at ease demonstrating, on the one hand, their finitude and relativity, as declaring, on the other, that the absolute, which it vaguely envisages as totality, is the dwelling place of all determinations, yet is incapable of raising either the positions or the negations to a true unity. – The task is indeed to demonstrate what the absolute is. But this demonstration cannot be either a determining or an external reflection by virtue of which determinations of the absolute would result, but is rather the *exposition of the absolute*, more precisely the absolute's *own exposition*, and only a *displaying of what it is*.

A. THE EXPOSITION OF THE ABSOLUTE

The absolute is not just *being*, nor even *essence*. The former is the first unreflected immediacy; the latter, the reflected immediacy; further, each is explicitly a totality, but a determinate totality. Being emerges in essence as *concrete existence*, and the connection of being and essence develops into the relation of *inner* and *outer*. The *inner* is *essence*, but as a totality whose essential determination is to be *referred to being* and to be being immediately. The *outer* is *being*, but with the essential determination of being immediately *connected with reflection* and, equally, in a relationless

identity with essence. The absolute itself is the absolute unity of the two; it is that which constitutes in general the *ground* of the essential relation which, as only relation, has yet to return into this its identity and whose ground is not yet *posited*. **11.371**

It follows that the determination of the absolute is to be *absolute form*, but at the same time not as an identity whose moments only are simple determinacies, but, on the contrary, as an identity whose moments are each explicitly the *totality* and hence, indifferent with respect to the form, the complete *content* of the whole. But, conversely, the absolute is absolute content in such a way that this content, which is as such indifferent plurality, explicitly has the negative connection of form by virtue of which its manifold is only *one* substantial identity.

Thus the identity of the absolute is for this reason absolute identity, because each of its parts is itself the whole or each determinateness is the totality, that is, because determinateness has become as such a thoroughly transparent reflective shine, a difference *that has disappeared in its posited-ness*. *Essence*, *concrete existence*, *the world existing in itself*, *whole*, *parts*, *force* – these reflected determinations appear to representation as true being valid in and for itself; but against them the absolute is the ground into which they have foundered. – Because in the absolute the form is now only simple self-identity, the absolute does not *determine* itself, for the determination is a difference of form which is valid as such from the start. But because the absolute at the same time contains every difference and form determination in general, or because it is itself absolute form and reflection, the *difference of content* must also come into it. But the absolute itself is the *absolute identity*; to be this identity is its *determination*, for the manifoldness of the world-in-itself and of the phenomenal world has all been sublated in it. – In the absolute itself there is no *becoming*, since the absolute is not being; nor does the absolute determine itself r*eflectively*, for it is not the essence which determines itself only inwardly; and it also does not *externalize itself*, for it is the identity of inner and outer. – But in this way the movement of reflection stands *over against* its absolute identity. The movement is sublated in this identity and is thus only its *inner*; but consequently its *outer*. – At first, therefore, the movement consists only in sublating its act in the absolute. It is the beyond of the manifold differences and determinations and of their movement, a beyond that *lies at the back* of the absolute. It is thus the *negative exposition* of the absolute earlier alluded to.[1] – In its true presentation, this exposition is the preceding whole of the logical

[1] Cf. above, 11.370.

movement of the spheres of *being and essence*, the content of which has not been gathered in from outside as something given and contingent; nor
11.372 has it been sunk into the abyss of the absolute by a reflection external to it; on the contrary, it has determined itself within it by virtue of its inner necessity, and, as being's own *becoming* and as the reflection of essence, has returned into the absolute as into its ground.

But this exposition has itself also a *positive* side, for in foundering to the ground the finite demonstrates that its nature is to be referred to the absolute, or to contain the absolute within. However, this side is not as much the positive exposition of the absolute as it is rather the exposition of the *determinations*, namely that these have the absolute for their abyss, but also for their *ground*,[2] or that that which imparts subsistence to them, to their reflective shine, is *the absolute* itself. – Being as shine is not *nothing but reflection*, reference to the absolute; or it *is* a shine inasmuch as that which *shines in it is the absolute*. This positive exposition thus halts the finite just before its disappearing: it considers it an expression and a copy of the absolute. But this transparency of the finite that lets only the absolute transpire through it ends up in complete disappearance, for there is nothing in the finite which would retain for it a difference over against the absolute; as a medium, it is absorbed by that through which it shines.

This positive exposition of the absolute is therefore itself only a reflective shine, for the true positive, that which contains the exposition and the expounded content, is the absolute itself. Whatever the further determinations that may occur, the form in which the absolute reflectively shines is a nullity which the exposition gathers up from *outside* and in which it gains for itself *a starting point* for its activity. Any such determination has in the absolute, not its beginning *but its end*. This expository process, therefore, though it is an absolute act because of its *reference* to the absolute into which it *returns*, is not so at its *starting point* which is a determination external to the absolute.

But in actual fact the exposition of the absolute is the absolute's *own* doing, an act that *begins from itself and arrives at itself*. The absolute, only as absolute identity, is absolute *in a determined guise*, that is, as *identical absolute*; it is *posited* as such by reflection over against opposition and manifoldness; or it is only the *negative* of reflection and determination in general. – It is not just the exposition of the absolute which is therefore something incomplete, but this *absolute* itself which is only *arrived* at. Or again, the absolute which is only as *absolute identity* is only *the absolute of*

[2] Hegel is playing on "*Abgrund* . . . *Grund*," "abyss . . . ground."

an external reflection. It is, therefore, not the absolutely absolute but the absolute in a determination, or it is *attribute*. **II.373**

But the absolute is not attribute just because it is the *subject matter* of an external reflection and is consequently something determined by it. – Or, reflection is not only *external* to it; but, precisely because it is *external* to it, it is *immediately internal* to it. The absolute is absolute only because it is not abstract identity but is the identity of being and essence, or the identity of the inner and the outer. It is therefore itself the absolute form that makes it reflectively shine within itself and determines it as attribute.

B. THE ABSOLUTE ATTRIBUTE

The expression which we have used, "the absolute absolute," denotes the absolute which in *its form* has *returned* back into itself or whose form is equal to its content. The attribute is just the *relative absolute*, a combination which only signifies the absolute in a *form determination*. For at first, before its complete exposition, the form is *only internally* or, which is the same, *only externally*; it is at first *determinate* form in general or negation in general. But because form is at the same time as the form of the absolute, the attribute is the whole content of the absolute; it is the totality which earlier appeared as a *world*, *or as one of the* sides of the *essential relation*, each of which is itself the whole. But both worlds, the phenomenal world and the world that exists in and for itself, were supposed to be *opposed* to each other in their essence. Each side of the essential relation was indeed equal to the other – the whole as much as the parts, the expression of force the same content as force itself, and the outer everywhere the same as the inner. But these sides were at the same time supposed each to have still an *immediate* subsistence of its own, the one side as existent immediacy and the other as reflected immediacy. In the absolute, on the contrary, these different immediacies have been reduced to a reflective shine, and the *totality* that the attribute is is *posited as its true and single subsistence*, while the *determination* in which it is is posited as *unessential subsistence*.

The absolute is attribute because, as simple absolute identity, it is in the determination of identity; now to the determination as such other determinations can be attached, for instance, also that there are *several* attributes. But because absolute identity has only this meaning, that not only all determinations have been sublated but that reflection itself has also sublated itself, all determinations are thus *posited* in it *as sublated*. Or the totality is posited as absolute totality. Or again, the attribute has

II.374 the absolute for its content and subsistence and, consequently, its form determination by which it is attribute is also posited, posited immediately as mere reflective shine; the negative is posited as negative. The positive reflective shine that the exposition gives itself through the attribute – in that it does not take the finite in its limitation as something that exists in and for itself but dissolves its subsistence into the absolute and expands it into attribute – sublates precisely this, that the attribute is attribute; it sinks it and its differentiating act into the *simple absolute*.

But since reflection thus reverts from its differentiating act only to the *identity* of the absolute, it has not at the same time left its externality behind and has not arrived at the true absolute. It has only reached the indeterminate, abstract identity, which is to say, the identity in the *determinateness* of identity. – Or, since reflection determines the absolute into attribute as *inner* form, this determining is something still distinct from externality; the inner determination does not penetrate the absolute; the attribute's expression, as something merely posited, is to disappear into the absolute.

The form by virtue of which the absolute would be attribute, whether it is taken as outer or inner, is therefore posited as something null in itself, an external reflective shine, or a mere *way and manner*.

C. THE MODE OF THE ABSOLUTE

The attribute is *first* the absolute in simple self-*identity*. *Second*, it is *negation*, a negation which is *as such* formal immanent reflection. These two sides constitute at first the two *extremes* of the attribute, the *middle term* of which is the attribute itself, since it is both the absolute and the determinateness. – The second of these extremes is the *negative as negative*, the reflection *external* to the absolute. – Or inasmuch as the negative is taken as the *inner* of the absolute and its *own* determination is to posit itself as mode, it is then the self-externality of the absolute, the loss of itself in the changeability and contingency of being, its having passed over into its opposite *without turning* back into itself, the manifoldness of form and content determinations that lacks totality. –

But the mode, the *externality* of the absolute, is not just this. It is rather externality *posited* as externality, a mere *way and manner*, hence the reflective shine as reflective shine, or *the reflection of form into itself*; hence, *the self-identity which is the absolute*. In actual fact, therefore, the absolute
II.375 is first posited as absolute identity only in the mode; it is what it is, namely self-identity, only as self-referring negativity, as *reflective shining* which is posited *as reflective shining*.

Hence, in so far as the *exposition* of the absolute begins from its absolute identity and passes over to the attribute and from there to the mode, it has therein exhaustively run through its moments. But *first*, in this course it does not just behave negatively towards these determinations; *its act* is rather the *reflective movement itself*, and it is only as such a movement that the *absolute truly is absolute identity*. – *Second*, the exposition does not thereby deal with mere *externality*, and the mode is not only the most external externality. Rather, since the mode is reflective shine as shine, it is an immanent turning back, the self-dissolving reflection, and it is in being this reflection that the absolute is absolute being. – *Third*, the reflective act of exposition seems to begin from its own determinations and from something external, to take up the modes or even the determinations of the attribute as if they were *found* outside the absolute and its contribution were only to reduce them to undifferentiated identity. But it has in fact found the determinateness from which it begins in the absolute itself. For as *first* undifferentiated identity, the absolute is itself only the *determinate absolute*, or attribute, because it is the unmoved, still unreflected absolute. This *determinateness*, since it is determinateness, belongs to the reflective movement, and it is through this movement alone that the absolute is determined as the *first identity*; through it alone that it has absolute form and does not just *exist as self-equal* but *posits itself as self-equal*.

Accordingly the true meaning of mode is that it is the absolute's own reflective movement; it is a *determining* by virtue of which the absolute would become, not an *other*, but what it already *is*; a transparent externality which is a *pointing* to itself; a movement *out* of itself, but in such a way that *being outwardly* is just as much inwardness, and consequently equally a positing which is not mere positedness but absolute being.

When therefore one asks for a *content* of the exposition, for *what* the absolute manifests, the reply is that the distinction of form and content in the absolute has been dissolved; or that just this is the content of the absolute, *that it manifests itself*. The absolute is the absolute form which in its diremption of itself is utterly identical with itself, is the negative *as* negative or the negative that rejoins itself and in this way alone is the absolute self-identity which equally is *indifferent towards its distinctions* or is absolute *content*. The content is therefore only this exposition itself.

As this self-bearing movement of exposition, as a *way* and *manner* which is its absolute identity with itself, the absolute is expression, not of an inner, nor over against an other, but simply as absolute manifestation of itself for itself. Thus it is *actuality*. **11.376**

Remark

Spinoza's concept of substance corresponds to the concept of the absolute, and to the relation of reflection to it, as presented here. Spinozism is a deficient philosophy because *reflection* and its manifold determining is in it *an external thinking*. – The substance of this system is *one substance*, one indivisible totality; there is no determinateness which would not be contained in this absolute and be dissolved into it; and all that is important is that anything that to the natural way of representing and to the determining of the understanding appears vaguely to occur as self-subsistent is totally reduced in this necessary concept to a mere positedness. – "*Determinateness is negation*"[3] is the absolute principle of Spinozist philosophy; this true and simple insight is at the basis of the absolute unity of substance. But Spinoza stops short at *negation* as *determinateness* or quality; he does not advance to the cognition of it as absolute, that is, *self-negating negation*; therefore *his substance does not contain the absolute form*, and the cognition of it is not a cognition from within. Of course, substance is the absolute unity of *thought* and being or extension; it therefore contains thought itself, but only in its *unity* with extension, that is to say, not as *separating* itself from extension and hence, in general, not as determining and informing, nor as a movement of return that begins from itself. For this reason, on the one hand substance lacks the principle of *personality* – a defect that has especially aroused indignation against Spinoza's system[4] – and, on the other hand, cognition is an external reflection that fails to comprehend what appears as finite – that is, the determinateness of the attribute and the mode, and in general itself as well – by not deriving them from substance; it behaves like an external understanding, taking up the determinations as *given* and *reducing* them to the absolute but not taking their beginning from it.

The concepts that Spinoza gives of substance are that it is the *cause of itself*, that its *essence includes concrete existence within itself*, that the concept of the absolute is *in no need of the concept of an other* by which it would have to be formed.[5] These concepts, however profound and correct, are

[3] See Spinoza, *Opera*, Vol. 4, ed. Carl Gebhardt (Heidelberg: Carl Winters, no year given), letter 50, 240. For an English translation, see *The Correspondence of Spinoza*, trans., ed. A. Wolff (New York: Russell & Russell, 1966), p. 270.

[4] Here Hegel probably has Jacobi primarily in mind. See Friedrich Heinrich Jacobi, *Über die Lehre des Spinoza in Briefen an den Herrn Moses Mendelssohn*, 2nd edition (Breslau: Gottlieb Löwe, 1789), 27, 31f. Beytrage IV: 335–341; *The Main Philosophical Writings and the Novel* Allwill, trans., ed. George di Giovanni (Montreal and Kingston: McGill Queen's University Press, 1994), 27, 31f., 363–4.

[5] Spinoza, *Ethics*, Part 1, Definition 1.

definitions that are *immediately* assumed in the science from the start. Mathematics and other subordinate sciences must begin with something *presupposed* that constitutes their element and positive substrate. But the absolute cannot be a first, an immediate. Essentially the absolute is rather *its result*. **II.377**

The further *definition of the attribute* is introduced in Spinoza *simply following* that of the absolute. Spinoza defines the attribute as *the manner in which the understanding conceives the essence of the absolute*.[6] Leaving aside the fact that the *understanding* is assumed to be by nature posterior to the attribute (for Spinoza defines it as *mode*),[7] the attribute, or determination as determination of the absolute, is made to *depend on an other*, namely the understanding, which simply occurs over against substance externally and immediately.

Spinoza further defines the attributes as *infinite* – infinite also in the sense of an *infinite multiplicity*.[8] But only *two* are named in what follows, *thought and extension*, and no indication is given of how the infinite multiplicity necessarily reduces to opposition, specifically this opposition of thought and extension. – These two attributes are for this reason *empirically* assumed. Thought and being display the absolute in a determination; the absolute itself is their absolute unity, so that the two are only unessential forms; the order of things is the same as the order of representations or thoughts, and the one absolute is viewed only in external reflection (by a mode) under both the two determinations, once as a totality of representations, and once again as a totality of things and their alterations. It is this external reflection that both generates the distinction of representation and being and reduces it to absolute identity, dissolving it there. But this whole movement goes on outside the absolute. True, the absolute is itself also *thought*, and therefore the movement is only in the absolute; but, as just remarked, it is in the absolute only as one with extension, and hence not as *this* movement, which is essentially also the moment of opposition. – Spinoza makes the sublime demand on thought that *it consider everything under the form of eternity*, *sub specie æterni*,[9] that is, as it is in the absolute. But in an absolute which is only unmoved identity, the attribute, like the mode, is only as *disappearing*, not as *becoming*, so that this disappearing also makes its positive beginning only from without.

[6] Spinoza, *Ethics*, Part 1, Definition 4.
[7] Spinoza, *Ethics*, Part 1, Proposition 31, Proof.
[8] Spinoza, *Ethics*, Part 2, Propositions 1, 2.
[9] Spinoza, *Ethics*, Part 2, Proposition 44, Corollary 2.

The third, *the mode*, is according to Spinoza an *affection* of substance,[10] the determinate determinateness, that which is *in an other* and is comprehended *through this other*. Strictly speaking, the only determination of the attributes is indeterminate difference; each *is supposed* to express the totality of substance and be comprehended by itself; but since each is the absolute as determined, it contains otherness and cannot be comprehended *by itself*. It is only in the mode, therefore, that the determination of the attribute is truly posited. Further, this third element remains mere mode; on the one hand, it is immediately *given*; on the other hand, its nothingness is not
11.378 recognized as reflection into itself. – Consequently, Spinoza's exposition of the absolute is indeed *complete* in so far as it begins with the absolute, lets the attribute follow therefrom, and ends with the mode. But these three are only enumerated *one after the other*, without the inner chain of development, and the third is not negation *as* negation, not the negatively self-referring negation by virtue of which it would *explicitly* be the turning back to the first identity and this identity be in turn truly identity. What is lacking, therefore, is the necessity of the progression of the absolute to inessentiality, as well as the dissolution in and for itself of the latter into identity; or again, missing are both the becoming of the identity and its determinations.

Similarly in the *oriental* representation of *emanation*, the absolute is the self-illuminating light. But it does not just illumine itself; it also *emanates*. Its emanations are *distancings* from its unclouded clarity; whatever is generated after is less perfect than that which precedes it and from which it arises. Emanation is taken only as a *happening*, becoming only as a progressive loss. Being thus becomes progressively obscured, and the night, the negative, which is the final term in the progression, does not revert back to the original light.

The lack of *immanent reflection* that affects both the Spinozist exposition of the absolute and the doctrine of emanation is remedied in Leibniz's concept of the *monad*.[11] – It is common for the one-sidedness of a philosophical principle to be countered by the opposite one-sidedness of another, and for a totality to emerge in them, taken together, as a sort of *scattered completeness*. – The *monad* is a *one*, a negative reflected into itself; it is the totality of the content of the world; in it the differentiated manifold has not only disappeared but is *preserved* in a negative manner. Spinoza's substance is the unity of the content; but this manifold content of the world *is* not as such in it but in external reflection. The monad is, therefore, essentially

[10] Spinoza, *Ethics*, Part 1, Definition 5. [11] Leibniz, *Principles of Nature and Grace*, §1.

representational; however, although indeed finite, it has no *passivity* but the alterations and the determinations in it are rather manifestations within it of itself. It is an *entelechy*; to manifest is its distinctive act. – The monad is thereby also *determined*, *differentiated from others*; the determinateness falls in the particular content and in the way and manner of the manifestation. Consequently the monad is the totality *in itself*, according to its substance and not *in its manifestation*. This *limitation* of the monad necessarily falls, not in the *self-positing* or *representational* monad, but in its in-itself; or it is absolute limit, a *predestination* which is posited through another being than itself. Moreover, since anything limited exists only with reference to **11.379** other limited things, but the monad is at the same time a self-contained absolute, the *harmony* of these limits, that is, the reciprocal references of the monads, falls outside them and is likewise pre-established by another being or *in itself*.

It is clear that although the *principle of immanent reflection* that constitutes the fundamental determination of the monad generally removes otherness and external influence, and by virtue of it the alterations of the monad are its own positing, the side of passivity due to an other is however only transformed into an absolute limitation, into a limitation of the *in-itself*. Leibniz ascribes to the monads a *certain* completeness in themselves, a *kind* of self-subsistence; they are *created* beings.[12] – When their limitation is more closely examined, the result of Leibniz's account is that the self-manifestation which belongs to them is the *totality of form*. It is a concept of the utmost importance that the alterations of the monad be represented as actions free of passivity, as self-*manifestations*, and that the principle of immanent reflection and of *individuation* stand out as essential. And it is necessary to have finitude consist in the fact that the content or the *substance is distinguished from the form*, and further, also that the one is limited while the other is infinite. But then we should find in the concept of the *absolute monad* not only that absolute unity of form and content but also the nature of reflection – which is, as self-referring negativity, to repel itself from itself – by which it posits and creates. And in the system of Leibniz we find indeed also the further point, that *God* is *the source of concrete existence* and *of the essence of the monads*,[13] that is, that the absolute limitations in the in-itself of the monads are not anything in and for themselves but vanish in the absolute. But in these determinations we still only find the common representations, left philosophically undeveloped without being raised to the speculative concept. So the principle of individuation does

[12] Leibniz, *Monadology*, §6. [13] Leibniz, *Monadology*, §43.

not receive the more profound elaboration which is its due. The concepts concerning the distinctions between the various finite monads and their relation to the absolute do not originate out of this being itself, do not originate absolutely, but belong rather to ratiocinative, dogmatic reflection and have not therefore attained inner coherence.

CHAPTER 2

Actuality

II.380

The absolute is the unity of inner and outer as a *first implicitly existent* unit. The *exposition* appeared as an *external* reflection which, for its part, has the immediate as something it has found, but it equally is its movement and the reference connecting it to the absolute and, as such, it leads it back to the latter, determining it as a mere "way and manner." But this "way and manner" is the determination of the absolute itself, namely its *first identity* or *its mere implicitly existent unity*. And through this reflection, not only is that first in-itself posited as essenceless determination, but, since the reflection is negative self-reference, it is through it that the in-itself becomes a mode in the first place. It is this reflection that, in sublating itself in its determinations and as a movement which as such turns back upon itself, is first truly absolute identity and, at the same time, the determining of the absolute or its modality. The mode, therefore, is the externality of the absolute, but equally so only its reflection into itself; or again, it is the absolute's *own manifestation*, so that this externalization is its immanent reflection and therefore its being in-and-for-itself.

So, as the *manifestation* that it is nothing, that it has no content, save to be the manifestation of itself, the absolute is *absolute form*. *Actuality* is to be taken as this reflected absoluteness. *Being* is not yet actual; it is the first immediacy; its reflection is therefore becoming and *transition into an other*; or its immediacy is not being-in-and-for-itself. Actuality also stands higher than *concrete existence*. It is true that the latter is the immediacy that has proceeded from ground and conditions, or from essence and its reflection. *In itself or implicitly*, it is therefore what actuality is, *real reflection*; but it is still not the *posited* unity of reflection and immediacy. Hence concrete existence passes over into *appearance* as it develops the reflection contained within it. It is the ground that has foundered to the ground; its determination, its vocation,[14] is to restore this ground, and

[14] *Bestimmung*, which can mean both "determination" and "vocation."

therefore it becomes essential relation, and its final reflection is that its immediacy be posited as immanent reflection and conversely. This unity, in which concrete existence or immediacy and the in-itself, the ground or
11.381 the reflected, are simply moments, is now *actuality*. The actual is therefore *manifestation*. It is not drawn into the sphere of *alteration* by its externality, nor is it the *reflective shining* of itself in *an other*. It just manifests itself, and this means that in its externality, and only in *it*, it is *itself*, that is to say, only as a self-differentiating and self-determining movement.

Now in actuality as this absolute form, the moments only are as sublated or formal, not yet realized; their differentiation thus belongs at first to external reflection and is not determined as content.

Actuality, as itself *immediate* form-unity of inner and outer, is thus in the determination of *immediacy* as against the determination of immanent reflection; or it is an *actuality* as against *a possibility*. The connection of the two to each other is the *third*, the actual determined both as being reflected into itself and as this being immediately existing. This third is *necessity*.

But *first*, since the actual and the possible are *formal distinctions*, their connection is likewise only *formal*, and consists only in this, that the one just like the other is a *positedness*, or in *contingency*.

Second, because in contingency the actual as well as the possible are a *positedness*, because they have retained their determination, *real actuality* now arises, and with it also real *possibility* and *relative necessity*.

Third, the reflection of relative necessity into itself yields *absolute necessity*, which is absolute *possibility* and *actuality*.

A. CONTINGENCY[15] OR FORMAL ACTUALITY, POSSIBILITY, AND NECESSITY

1. Actuality is formal inasmuch as, as a first actuality, it is only *immediate*, *unreflected* actuality, and hence is only in this form determination but not as the totality of form. And so it is nothing more than a *being*, or concrete *existence* in general. But because *by essence* it is not mere concrete existence but is the form-unity of the in-itselfness or inwardness and externality, it
11.382 immediately contains *in-itselfness* or *possibility*. *What is actual is possible*.

2. This possibility is actuality reflected into itself. But this *reflectedness*, itself a first, is equally something formal and consequently only *the determination of self-identity* or of the in-itself in general.

[15] *Zufälligkeit*, which can be translated as "contingency" and also as "accidentality," which is the term that I would prefer. But Hegel later shifts to the Latinate *Accidentalität*, very likely to connect the term with "accident" as contrasted to "substance."

But because the determination is here *totality of form*, this in-itself is determined as *sublated* or essentially only with reference to actuality; as the negative of actuality, it is *posited* as negative. Possibility entails, therefore, *two* moments. It has first the positive moment of being a being-reflected-into-itself. But this being-reflected-into-itself, since in the absolute form it is reduced to a moment, no longer has the value of *essence* but has rather the *negative* meaning that possibility is (in a second moment) something deficient, that it points to an other, to actuality, and is completed in this other.

According to the first, merely positive side, possibility is therefore the mere form determination of *self-identity*, or the form of essentiality. As such it is the relationless, indeterminate receptacle of everything in general. – In this formal sense of possibility, *everything is possible that does not contract itself*; the realm of possibility is therefore limitless manifoldness. But every manifold is *determined in itself* and *as against an other*: it possesses negation within. Indifferent *diversity* passes over as such into *opposition*; but opposition is contradiction. Therefore, all things are just as much contradictory and hence *impossible*.

– When we therefore say of something that "it is possible," this purely formal assertion is just as superficial and empty as the principle of contradiction, and any content that we put into it, "A is possible," says no more than "A is A." Left undeveloped, this content has the form of *simplicity*; only after being resolved into its determinations, does *difference* emerge within it. To the extent that we stop at that simple form, the content remains something self-identical and hence *a possible*. But we do not say anything by it, just as we do not with the principle of identity.

Yet the possible amounts to more than just the principle of identity. The possible is *reflected immanent reflectedness*; or the identical simply as *a moment* of the totality, hence also as determined not *to be in itself*; it therefore has the second determination of being *only* a possible and the *ought-to-be* of the totality of form. Without this ought-to-be, possibility is *essentiality* as such; but the absolute form entails this, that essence itself is only a moment and that it has no truth without being. Possibility is this mere essentiality, but so *posited* as to be only a moment, to be disproportionate with respect to the absolute form. It is the in-itself, determined as only a *posited* or, equally, as *not to be in itself*. – **11.383**

Internally, therefore, possibility is contradiction, or it is *impossibility*.

This finds expression at first in this way, that possibility as *form determination posited as sublated* possesses a *content* in general. As possible, this content is an in-itself which is at the same time something sublated or an

otherness. But because this content is only a possible, an *other* opposite to it is equally *possible*. "A is A"; then, too, "– A is – A." These two statements each express the possibility of its content determination. But, as identical statements, they are indifferent to each other; that the other is also added, is not *posited* in either. Possibility is the connection comparing the two; as a reflection of the totality, it implies that the opposite also is possible. It is therefore the *ground* for drawing the connection that, *because* A equals A, – A also equals – A; entailed in the possible A there is also the possible not-A, and it is this reference itself connecting them which determines both as possible.

But this connection, in which the one possible also contains its other, is as such a contradiction that sublates itself. Now, since it is determined to be reflective and, as we have just seen, reflectively self-sublating, it is also therefore an immediate and it consequently becomes *actuality*.

3. This actuality is not the first actuality but reflected actuality, *posited as unity of itself and possibility*. What is actual is as such possible; it is in immediate positive identity with possibility; but the latter has determined itself as *only possibility*; consequently the actual is also determined *as only a possible*. And because possibility is *immediately* contained in actuality, it is immediately in it as sublated, as *only* possibility. Conversely, actuality which is in unity with possibility is only sublated immediacy; or again, because formal actuality is only *immediate* first actuality, it is only a moment, only sublated actuality, or only *possibility*.

With this we also have a more precise expression of the extent to which *possibility is actuality*. Possibility is not yet *all* actuality; there has been no talk yet of real and absolute actuality. It is still only the possibility as it first presented itself, namely the formal possibility that has determined itself as being *only* possibility and hence the formless actuality which is only *being* or concrete existence in general. Everything possible has therefore in general a *being* or a *concrete existence*.

This unity of possibility and actuality is *contingency*. – The contingent is an actual which is at the same time determined as only possible, an
11.384 actual whose other or opposite equally is. This actuality is, therefore, mere being or concrete existence, but posited in its truth as having the value of a positedness or a possibility. Conversely, possibility is *immanent reflection* or the *in-itself* posited as positedness; what is possible is an actual in this sense of actuality, that it has only as much value as contingent actuality; it is itself something contingent.

The contingent thus presents these two sides. First, in so far as it has possibility *immediately* in it, or, what is the same, in so far as this possibility

is sublated in it, it is *not positedness*, nor is it mediated, but is *immediate* actuality; it has *no ground*. – Because this immediate actuality pertains also to the possible, the latter is determined no less than the actual as contingent and is likewise *groundless*.

But, *second*, the contingent is the actual as what is *only* possible, or as a *positedness*; thus the possible also, as formal in-itself, is only positedness. Consequently, the two are both not in and for themselves but have their immanent reflection in an other, *or they do have a ground*.

The contingent thus has no ground because it is contingent; and for that same reason it has a ground, because it is contingent.

It is the *posited*, immediate *conversion* of inner and outer, or of immanently-reflected-being and being, each into the other – *posited*, because possibility and actuality both have this determination in them by being moments of the absolute form. – So actuality, in its *immediate* unity with possibility, is only concrete existence and is determined as groundless, something *only posited* or *only possible*; or, as reflected and determined *over against* possibility, it is separated from possibility, from immanent reflectedness, and then, too, is no less immediately *only* a possible. – Likewise possibility, as *simple* in-itself, is something immediate, *only* an existent in general; or, *opposed* to actuality, it equally is an in-itself without actuality, *only* a possible, but, for that very reason, again only a concrete, not immanently reflected, existence in general.

This *absolute restlessness* of the *becoming* of these two determinations is *contingency*. But for this reason, because each determination immediately turns into the opposite, in this opposite each equally *rejoins itself*, and this *identity* of the two, of each in the other, is *necessity*.

The necessary is an *actual*; as such it is immediate, *groundless*; but it equally has its actuality *through an other* or in its ground and is at the same time the positedness of this ground and its reflection into itself; the **11.385**
possibility of the necessary is a sublated one. The contingent is therefore necessary because the actual is determined as a possible; its immediacy is consequently sublated and is repelled into the *ground* or the *in-itself*, and into the *grounded*, equally because its *possibility*, this *ground-grounded-connection*, is simply sublated and posited as being. What is necessary *is*, and this existent is *itself the necessary*. At the same time it is *in itself*; this immanent reflection is an *other* than that immediacy of being, and the necessity of the existent is *an other*. Thus the existent is not the necessary; but this in-itself is itself only positedness; it is sublated and itself immediate. And so actuality, in that from which it is distinguished, in possibility, is identical with itself. As this identity, it is necessity.

B. RELATIVE NECESSITY OR REAL ACTUALITY, POSSIBILITY, AND NECESSITY

1. The necessity which has resulted is *formal* because its moments are formal, that is, simple determinations which are a totality only as an immediate unity, or as an immediate conversion of the one into the other, and thus lack the shape of self-subsistence. – The unity in this formal necessity is therefore simple at first, and indifferent to its differences. As the *immediate* unity of the form determinations, this necessity is *actuality*, but an actuality which, since its unity *is now determined as indifferent* to the *difference of* the form determinations, has a *content*. This content as an indifferent identity contains the form also as indifferent, that is, as a mere *variety* of determinations, and is a *manifold* content in general. This actuality is *real actuality*.

Real actuality is *as such* at first the thing of many properties, the concretely existing world; but it is not the concrete existence that dissolves into appearance but, as actuality, it is at the same time an in-itself and immanent reflection; it preserves itself in the manifoldness of mere concrete existence; its externality is an inner relating only to *itself*. What is actual *can act*; some-
11.386 thing announces its actuality *by what it produces*. Its relating to an other is the manifestation *of itself*, and this manifestation is neither a transition (the immediate something *refers* to the other in this way) nor an appearing (in this way the thing only is *in relation* to an other); it is a self-subsistent which has its immanent reflection, its determinate essentiality, in another self-subsistent.

Now real actuality likewise has *possibility* immediately *present in it*. It contains the moment of the in-itself; but, since it is in the first instance only *immediate* unity, it is in *one* of the determinations of form and hence distinguished, as immediate existent, from the in-itself or possibility.

2. This possibility, as the in-itself of *real* actuality, is itself *real possibility*, at first the in-itself *full of content*. – Formal possibility is immanent reflection only as abstract identity, the absence of contradiction in a something. But when we delve into the determinations, the circumstances, the conditions of a fact in order to discover its possibility, we do not stop at this formal possibility but consider its real possibility.

This real possibility is itself *immediate concrete existence*, but no longer because possibility as such, as a formal moment, is immediately its opposite, a non-reflected actuality, but because this determination pertains to it by the very fact of being *real* possibility. The real possibility of a fact is therefore the immediately existent manifoldness of circumstances that refer to it.

This manifoldness of existence is therefore indeed both possibility and actuality, but their identity is at first only the *content* which is indifferent to these form determinations; they therefore constitute the form, *determined* as against their identity. – Or the *immediate* real actuality, because it is immediate, is determined as against its possibility; as this determinate and hence reflected actuality, it is *real possibility*. This real possibility is now indeed the posited *whole* of the form, but of the form in the determinateness of actuality as formal or immediate and equally of possibility as the abstract in-itself. This actuality, therefore, which constitutes the possibility of a fact, is not *its own possibility* but the in-itself of an *other* actual; itself, it is the actuality that ought to be sublated, the possibility as *only* possibility. – Real possibility thus *constitutes* the *totality of conditions*, a dispersed actuality which is not reflected into itself but is determined to be the in-itself of an other and intended in this determination to return to itself. **11.387**

What is really possible is, therefore, something formally identical according to its *in-itself*, free of contradiction because of its *simple* content determination; but, as self-identical, this something must also not contradict itself according to its developed and differentiated circumstances and all else connected with it. But, *secondly*, because it is manifold in itself and in manifold connection with others, and variety inherently passes over into opposition, it is contradictory. Whenever a possibility is in question, and the issue is to demonstrate its contradiction, one need only fasten on to the multiplicity that it contains as content or as its conditioned concrete existence, and from this the contradiction will easily be discovered. – And this contradiction is not just a function of comparing; on the contrary, the manifold of concrete existence is *in itself* this, to sublate itself and to founder to the ground: in this it explicitly has the determination of *being only a possibility*. – Whenever all the conditions of a fact are completely present, the fact is actually there; the completeness of the conditions is the totality as in the content, and the *fact* is *itself* this content determined as being equally actual as possible. In the sphere of the conditioned ground, the conditions have the form (that is, the ground or the reflection that stands on its own) *outside them*, and it is this form that makes them moments of the fact and elicits concrete existence *in them*.[16] Here, on the contrary, the immediate actuality is not determined to be condition by virtue of a presupposing reflection, but the supposition is rather that the immediate actuality is itself the possibility.

[16] Cf. above, 11.312ff.

In self-sublating real possibility, it is a twofold that is now sublated; for this possibility is itself the twofold of actuality and possibility. (1) The actuality is formal, or is a concrete existence which appeared to subsist immediately, and through its sublating becomes reflected being, the moment of an other, and thus comes in possession of the *in-itself*. (2) That concrete existence was also determined as *possibility* or as the *in-itself*, but of an other. As it sublates itself, this in-itself of the other is also sublated and passes over into *actuality*. – This movement of self-sublating real possibility thus produces *the same moments that are already present*, but each as it comes to be out of the other; in this negation, therefore, the possibility is also not a *transition* but *a self-rejoining*. – In formal possibility, if something was possible, then an *other* than it, not *itself*, was also possible. Real possibility no longer has *such an other* over against it, for it is real in so far as it is itself also actuality. Therefore, as its *immediate concrete existence*, *the circle of conditions*, sublates itself, it makes itself into the *in-itselfness*
11.388 which it already is, namely the *in-itself* of an other. And conversely, since its moment of in-itselfness thereby sublates itself at the same time, it becomes actuality, hence the moment which it likewise already is. – What disappears is consequently this, that actuality was determined as the possibility or the in-itself of an *other*, and, conversely, the possibility as an actuality which is *not that* of which it is the possibility.

3. The *negation* of real possibility is thus *its self-identity*; inasmuch as in its sublating it is thus within itself the recoiling of this sublating, it is *real necessity*.

What is necessary *cannot be otherwise*; but what is only *possible* can be, for possibility is the in-itself which is only positedness and hence essentially otherness. Formal possibility is this identity as transition into the other as such; but real possibility, since it has the other moment of actuality within it, is already itself necessity. Hence what is really possible can no longer be otherwise; under the given conditions and circumstances, nothing else can follow. Real possibility and necessity are, therefore, only *apparently* distinguished; theirs is an *identity* that does not first *come to be* but is *already* presupposed at their base. Real possibility is therefore a connection *full of content*, for the content is that identity, existing in itself, which is indifferent to form.

But this necessity is at the same time *relative*. – For it has a *presupposition* from which it begins; it takes its *start* from the *contingent*. For the real actual is as such the *determinate* actual, and first has its *determinateness as immediate being* in that it is a multiplicity of concretely existing circumstances; but this immediate being as determinateness is also the *negative* of

itself, is an in-itself or possibility and so real possibility. As this unity of the two moments, it is the totality of form, but a totality which is *still external to itself*; it is the unity of possibility and actuality in such a way that (1) the manifold concrete existence is possibility *immediately* or positively: it is a possible, something self-identical as such, because it is an actual; (2) inasmuch as this possibility of concrete existence is posited, it is determined as *only* possibility, as the immediate conversion of actuality into its opposite – or as *contingency*. Hence this possibility which immediate actuality has within in so far as it is condition, is only the in-itself or the possibility of an *other*. Because this in-itself, as shown,[17] sublates itself and this positedness is itself posited, real possibility becomes indeed necessity; but this necessity thus begins from that unity of the possible and the actual which is not yet reflected into itself – this *presupposing* and the *movement which turns back unto itself* are still separate – or *necessity has not yet determined itself out of itself into contingency*. **11.389**

The relativity of real possibility is manifested in the *content* by the fact that the latter is at first only the identity indifferent to form, is therefore distinct from it and a *determinate content* in general. A necessary reality is for this reason any limited actuality which, because of its limitation, is in some other respect also only something *contingent*.

In actual fact, therefore, *real necessity* is *in itself also contingency*. – This first becomes apparent because real necessity, although something necessary *according to form*, is still something limited according to content, and derives its contingency through the latter. But this contingency is to be found also in the form of real necessity because, as shown,[18] real possibility is the necessary only *in itself*, but as posited it is the mutual *otherness* of actuality and possibility. Real necessity thus contains contingency; it is the turning back into itself from the restless *being-the-other-of-each-other* of actuality and possibility, but not the turning back from itself to itself.

In itself, therefore, we have here the unity of necessity and contingency; this unity is to be called *absolute actuality*.

c. absolute necessity

Real necessity is determinate necessity; formal necessity does not yet have any content and determinateness in it. The *determinateness* of necessity consists in its having its negation, contingency, within it. This is how it has shown itself to be.

[17] Cf. above, 11.387. [18] Cf. above, 11.388.

But *in its first simplicity* this determinateness is actuality; *determinate* necessity is therefore immediate *actual necessity*. This actuality *which is itself as such necessary*, since it contains necessity as its *in-itself*, is *absolute actuality* – an actuality which can no longer be otherwise, for its *in-itself* is not possibility but necessity itself.

But because this *actuality* is posited *to be absolute*, that is to say, *to be itself the unity of itself and possibility*, it is consequently only an *empty* determination, or it is *contingency*. – This *emptiness* of its determination makes it into a *mere possibility*, one which can just as well be an *other* and is determined as possibility. But this possibility is itself *absolute possibility*, for it is precisely the possibility of being equally determined as possibility
11.390 and actuality. For this reason, because it is this indifference towards itself, it is posited as empty, *contingent* determination.

Thus real necessity not only contains contingency *implicitly*, but the latter also *becomes* in it; but this *becoming*, as externality, is itself only the *in-itself* of the necessity, because it is only an *immediate determinateness*. But it is not only this but the *necessity's own* becoming – or the *presupposition* which it had is its own positing. For as real necessity, it is the sublatedness of actuality into possibility and of possibility into actuality; because it is this *simple conversion* of one of these moments into the other, it is also their *positive unity*, for in the other each *rejoins itself*. And so it is *actuality*, yet an actuality which is nothing but this rejoining of form with itself. Its negative positing of these moments is thereby itself *the presupposing* or the positing *of itself as sublated*, or the positing of *immediacy*.

But it is precisely in this positing that this actuality is determined as the negative; it rejoins itself from the actuality which was real possibility; this new actuality thus comes to be only out of its in-itself, out of *the negation of itself*. – Consequently, it is at the same time immediately determined as *possibility*, as *mediated* by virtue of its negation. But accordingly, this possibility is immediately nothing but *this mediating* in which the in-itself, namely the possibility itself and the mediating, both in the same manner, are *positedness*. – Thus it is necessity which is equally the sublating of this positedness, or the positing of *immediacy* and of the *in-itself*, just as in this very sublating it is the *determining* of it as *positedness*. It is necessity itself, therefore, that determines itself as *contingency*: in its being it repels itself from itself, in this very repelling has only returned to itself, and in this turning back which is its being has repelled itself from itself.

Thus has form pervaded in its realization all its distinctions; it has made itself transparent and, as *absolute necessity*, is only this simple *self-identity of being in its negation*, or in essence. – The distinction itself of *content* and

form has thus equally vanished; for that unity of possibility in actuality and actuality in possibility is the *form* which in its determinateness or in positedness is indifferent towards itself: it is the *fact full of content* on which the form of necessity externally ran its course. But necessity is thus this *reflected* identity of the two determinations as indifferent to them, and hence the form determination of the *in-itself* as against the *positedness*, **11.391** and this possibility constitutes the limitation of the content which real necessity had. The resolution of this difference is however the absolute necessity whose content is this difference which in this necessity penetrates itself.

Absolute necessity is therefore the truth in which actuality and possibility in general as well as formal and real necessity return. – As we have just seen,[19] it is being which in its negation, in essence, refers itself to itself and is being. It is equally simple immediacy or *pure being* and simple immanent reflection or *pure essence*; it is this, that the two are one and the same. – The absolutely necessary only *is* because it *is*; it otherwise has neither condition nor ground. – But it equally is pure *essence*, its *being* the simple immanent reflection; it is *because* it is. As reflection, it has a ground and a condition but has only *itself* for this ground and condition. It is in-itself, but its in-itself is its immediacy, its possibility is its actuality. – *It is*, *therefore*, *because it is*; as the *rejoining* of being with itself, it is essence; but because this simple is equally immediate simplicity, it is *being*.

Absolute necessity is thus the *reflection or form of the absolute*, the unity of being and essence, simple immediacy which is absolute negativity. *On the one hand*, therefore, its differences are not like the determinations of reflection but *an existing manifoldness*, a differentiated actuality in the shape of others independently subsisting over against each other. *On the other hand*, since its connection is that of absolute identity, it is the *absolute conversion* of its actuality into its possibility and its possibility into its actuality. – Absolute necessity is therefore *blind*. On the one hand, the two different terms determined as actuality and possibility have the shape of *immanent reflection* as *being*; they are therefore *free actualities*, neither of which reflectively shines in the other, nor will either allow in it a trace of its reference to the other; grounded in itself, each is inherently necessary. Necessity as *essence* is concealed in this *being*; the reciprocal contact of these actualities appears, therefore, as an empty externality; the actuality *of the one in the other* is the possibility which is *only possibility*, *contingency*. For being is posited as absolutely necessary, as the self-mediation

[19] In the preceding page, 11.390.

which is the absolute negation of mediation-through-other, or being which is identical only with being; consequently, an *other* that has actuality in *being*, is therefore determined as something *merely possible*, as *empty positedness*.

But this *contingency* is rather absolute necessity; it is the *essence* of those
11.392 free, inherently necessary actualities. This essence is *averse to light*, because there is no *reflective shining* in these actualities, no reflex – because they are grounded purely in themselves, are shaped for themselves, manifest themselves only to *themselves* – because they are only being. – But their *essence* will break forth in them and will reveal what *it* is and what *they* are. The *simplicity* of their being, their resting just on themselves, is absolute negativity; it is the *freedom* of their reflectionless[20] immediacy. This negative breaks forth in them because being, through this same negativity which is its essence, is self-contradiction; it will break forth against this being in the form of being, hence as the *negation* of those actualities, a negation *absolutely different* from their being; it will break forth as their *nothing*, as an *otherness* which is just as *free* towards them as their being is free. – Yet this negative was not to be missed in them. In their self-based shape they are indifferent to *form*, are a *content* and consequently *different* actualities and a *determinate* content. This content is the *mark* that necessity impressed upon them by letting them go free as absolutely actual – for in its *determination* it is an absolute turning back into itself. It is the mark to which necessity appeals as witness to its right, and, overcome by it, the actualities now perish. This manifestation of what *determinateness* is in its truth, that it is negative self-reference, is a *blind* collapse into otherness; *in the sphere of immediate existence*, the *shining* or the *reflection* that breaks out in it is a *becoming*, a *transition* of being into nothing. But, conversely, *being* is equally *essence*, and *becoming* is *reflection* or *a shining*. Thus the externality is its inwardness; their connection is one of absolute identity; and the *transition* of the actual into the possible, of being into nothing, is a *self-rejoining*; contingency is absolute necessity; it is itself the presupposing of that first absolute actuality.

This *identity of being with itself* in its negation is now *substance*. It is this unity as *in its negation* or as *in contingency*; and so, as *relation to itself*, it is *substance*. The *blind* transition of necessity is rather the absolute's *own exposition*, its movement in itself which, in its externalization, reveals itself instead.

[20] *scheinlos*.

CHAPTER 3

The absolute relation

II.393

Absolute necessity is not so much the *necessary*, even less *a* necessary, but *necessity* – being simply as reflection. It is relation because it is a distinguishing whose moments are themselves the whole totality of necessity, and therefore *subsist* absolutely, but do so in such a way that their subsisting is *one* subsistence, and the difference only the *reflective shine* of the movement of exposition, and this reflective shine is the absolute itself. – Essence as such *is* reflection or a shining; as absolute relation, however, essence is the *reflective shine posited as reflective shine*, one which, as such self-referring, is *absolute actuality*. – The absolute, first expounded by *external reflection*, as absolute form or as necessity now expounds itself; this self-exposition is its self-positing, and *is* only this self-positing. – Just as the *light* of nature is not a something, nor is it a thing, but its being is rather only its shining, so manifestation is self-identical absolute actuality.

The sides of the absolute relation are not, therefore, *attributes*. In the attribute the absolute reflectively shines only in one of its moments, as in a *presupposition* that *external reflection* has simply assumed. But the *expositor* of the absolute is the *absolute* necessity which, as self-determining, is identical with itself. Since this necessity is the reflective shining posited as reflective shining, the sides of this relation, because they are as shine, are *totalities*; for as shine, the differences are themselves and their opposite, that is, they are the whole; and, conversely, they thus are only shine because they are totalities. Thus this distinguishing, this reflecting shining of the absolute, is only the identical positing of itself.

This relation in its immediate concept is the relation of *substance* and *accidents*, the immediate internal disappearing and becoming of the absolute reflective shine. If substance determines itself as a *being-for-itself* over against an *other* or is absolute relation as something real, then we have the *relation of causality*. Finally, when this last relation passes over into *reciprocal causality* by referring itself to itself, we then have the absolute relation also *posited* in accordance with the determination it contains;

this *posited unity* of itself in its *determinations*, *which* are *posited as the whole itself* and consequently equally as determinations, is then the
II.394 *concept*.

A. THE RELATION OF SUBSTANTIALITY

Absolute necessity is absolute relation because it is not *being* as such but *being* that is *because* it is, being as the absolute mediation of itself with itself. This being is *substance*; as the final unity of essence and being, it is the being in *all* being. It is neither the unreflected immediate, nor something abstract standing behind concrete existence and appearance, but the immediate actuality itself, and it is this actuality as being absolutely reflected into itself, as a *subsisting* that exists in and for itself. – Substance, as this unity of being and reflection, is essentially the *shining* and the *positedness* of itself. The shining is a *self-referring* shining, thus it *is*; this being is substance as such. Conversely, this being is only the self-identical *positedness*, and as such it is *shining totality*, *accidentality*.

This shining is identity as identity of form – the unity of possibility and actuality. It is *becoming* at first, contingency as the sphere of coming-to-be and passing-away; for in the determination of *immediacy* the connection of possibility and actuality is the *immediate conversion* of the two into each other as *existents*, of each into its other as only an *other* to it. – But because being is shine, their relation is also one of identical terms or of terms shining in one another, that is, reflection. The movement of accidentality, therefore, exhibits in each of its moments the mutual reflective shine of the *categories* of being and of the *reflective determinations* of essence. – The immediate *something* has a *content*; its immediacy is at the same time reflected indifference towards the form. This content is determinate, and because this determinateness is one of being, the something *passes over* into an other. But quality is also a determinateness of reflection; as such, it is indifferent *diversity*. But this diversity is animated into *opposition*, and returns to the ground which is the *nothing*, but also *immanent reflection*. This reflection sublates itself; but it is itself also reflected in-itselfness: so it is possibility, and this in-itselfness, in its transition which is equally immanent reflection, is *necessary actuality*.

This movement of accidentality is the *actuosity* of substance *as the tranquil coming forth of itself*. It is not active *against* something, but only against itself as a simple unresisting element. The sublating of *a presupposition* is the disappearing shine; only in the act of *sublating* the immediate does this

immediate itself come to be, or is that shining; the beginning that begins from itself is first of all the positing of this itself from which the beginning is made. **11.395**

Substance, as this identity of the reflective shining, is the totality of the whole and embraces accidentality in itself, and accidentality is the whole substance itself. Its differentiation into the *simple identity of being* and the *flux of accidents* within it is one form of its shining. *That simple being* is the formless *substance of the imagination* for which the shine has not determined itself as shine, but which holds on, as on an absolute, to this indeterminate identity that has no truth but only is the determinateness of *immediate* actuality, or equally so of *in-itselfness* or possibility – form determinations that fall into accidentality. –

The other determination, *the flux of accidents*, is the absolute *form-unity* of accidentality, substance as *absolute power*. – The ceasing-to-be of the accident is its return as actuality into itself, as into its in-itself or into its possibility; but this, its in-itself, is itself only a positedness and therefore also actuality, and because these form determinations are equally determinations of content, this possible is an actual differently determined also according to content. Substance manifests itself through the actuality, with the content of the latter into which it translates the possible, as *creative power*, and, through the possibility to which it reduces the actual, as *destructive power*; the creating is destructive and the destructing creative, for the negative and the positive, possibility and negativity are in substantial necessity absolutely united.

The *accidents* as such – and there are *several* of them, because plurality is one of the determinations of being – have *no power* over each other. They are the immediately existent something, or the something that immediately exists for itself; concretely existing things of manifold properties; or wholes consisting of parts, self-subsisting parts; forces in need of reciprocal solicitation and conditioning each other. In so far as such an accidental being seems to exercise a power over an other, that power is that of substance that encompasses them both within itself and, as negativity, posits an inequality of value: one it determines as ceasing-to-be and another as having a different content and as coming-to-be, the one as passing over into its possibility and the other into actuality accordingly – ever dividing itself into this difference of form and content and ever purifying itself of this one-sidedness, but in this purification ever falling back into determination and division. – One accident thus drives out another only because its own *subsisting* is this very totality of form and content into which it, as well as its other, equally perishes.

Because of this *immediate identity* and presence of substance in the
11.396 accidents, there is still no *real* difference present. In this *first* determination, substance is not yet manifested according to its whole concept. When substance, as self-identical being-in-and-for-itself, is differentiated from itself as a totality of *accidents*, it is substance itself, as *power*, that *mediates* the difference. This power is *necessity*, the positive persistence of the accidents in their negativity and their mere positedness in their subsistence; this *middle* is thus the unity of substantiality and accidentality themselves, a middle whose *extremes* have no subsistence of their own. Substantiality is, therefore, only the relation as immediately vanishing; it refers to itself not *as a negative* and, as the immediate unity of power with itself, is in the form only of *its identity*, not of its *negative essence*; only one of its moments, that of negativity or of difference, vanishes altogether; the other moment of identity does not. – Another way of considering the matter is this. The shine or the accidentality is indeed *in itself* substance by virtue of the power, but is not thus *posited* as this self-identical shine; and therefore substance has only the accidentality, not itself, for its shape or positedness; it is not substance *as* substance. The relation of substantiality is at first, therefore, only this, that substance *manifests* itself as a *formal power* whose differences are not substantial; in fact, substance only is as the *inner* of the accidents, and these only are *in the substance*. Or this relation is only the shining of totality as *becoming*; but it is equally reflection and, for this reason, the accidentality which substance is *in itself* is also *posited* as such; it is thus *determined* as self-referring negativity over against itself, *determined* as self-referring simple *identity* with itself; and it is *substance that exists in and for itself*, *substance endowed with power*. Thus the relation of substantiality passes over into the *relation of causality*.

B. THE RELATION OF CAUSALITY

Substance is power – power *reflected into itself*, not transitive power but power that posits *determinations* and *distinguishes them from itself*. As self-referring in its determining, *it* is *itself* that which it posits as a negative or makes into a *positedness*. This positedness is, as such, sublated substantiality, the merely posited, the *effect*; the substance that exists for itself is, however, *cause*.

This relation of causality is in the first place only this *relation* of cause
11.397 and effect; as such, it is the *formal relation of causality*.

a. Formal causality

1. Cause is *originative* as against the effect. – As power, substance *is the reflective shining*, or it *has* accidentality. But in this shining, as power, it equally is an immanent reflection; it thus *expounds* its transition, *and this reflective shine is determined as reflective shine*, or the accident is *posited* as being just this, something *posited*. – But in its determining substance does not proceed from accidentality, as if the latter were an *other beforehand* and were determined as determinateness only then, but the two are one actuosity. Substance as power *determines itself*; but this determining is immediately itself the sublation of the determining and a turning back. *It determines itself*: *substance*, that which determines, is thus the *immediate* and that which is itself already determined; in determining *itself* it therefore posits the already determined *as determined*; and thus it has sublated the positedness and has returned into itself. – Conversely, because this turning back is the negative reference of substance to itself, it is itself a *determining* or the repelling of itself from itself; it is through this turning back that the determinate *comes to be* from which substance seems to begin and now to posit as something which it has found already determined. – Absolute actuosity is thus *cause* – the power of substance in *its truth* as the manifestation by which that which is *in itself*, the accident or the positedness, is immediately expounded in its becoming, is *posited as positedness*, *as effect*. – This effect is, therefore, *first* the same as what the accidentality of the relation of substance is, namely substance as *positedness*; but, *second*, an accident is substantially such only by vanishing, only as transient; but as effect it is positedness as self-identical; in the effect the cause is manifested as the whole substance, that is to say, as reflected into itself in the positedness itself as such.

2. Over against this *positedness* reflected into itself, this determined as determined, there stands substance as the *non-posited* original. Because substance is as absolute power a turning back into itself, yet this turning back is itself a *determining*, it is no longer the mere *in-itself* of its accident but is also posited as this in-itself. Substance has *actuality*, therefore, only as cause. But this actuality in which its *in-itself*, its determinateness in the relation of substantiality, is now posited *as determinateness*, is *effect*; therefore substance has the actuality which it has as cause *only in its effect*. – This is the *necessity* which is cause. – It is *actual* substance, because as power substance determines itself; but it is at the same time cause, because **11.398** it expounds this determinateness or posits it as positedness and thus posits its actuality as positedness or effect. This is the other of cause, the

positedness as against the original and as *mediated* through it. But cause, as necessity, equally sublates this mediating and, in *determining itself* as the originally self-referring term, *as against* the mediated, *turns back* to itself; for positedness is determined *as* positedness, and consequently as self-identical; therefore, cause is truly actual and self-identical only in its effect. – The effect is therefore *necessary*, because it is the manifestation of the cause or is this necessity which the cause is. – Only as this necessity is cause self-moving, self-initiating without being solicited by another, *self-subsisting source of production out of itself*; it must *effect*; its originariness is this, that it is because its immanent reflection is a positing that determines and conversely; the two are one unity.

Consequently, an effect contains nothing whatever that the cause does not contain. Conversely, *a cause contains nothing that is not in its effect*. A cause is cause only to the extent that it produces an effect; to be *cause is nothing but this determination of having an effect*, and *to be effect is nothing but this determination of having a cause*. Cause as such entails its effect, and the effect entails the cause; in so far as a cause has not acted yet or has ceased to act, it is not a cause; and the effect, in so far as its cause is no longer present, is no longer an effect but an indifferent actuality.

3. Now in this *identity* of cause and effect the form distinguishing them respectively, as that which exists in itself and that which is posited, is sublated. The cause *is extinguished* in its effect and the effect too is thereby extinguished, for it only is the determinateness of the cause. Hence this causality which has been extinguished in the effect is an *immediacy* which is indifferent to the relation of cause and effect and comes to it externally.

b. The determinate relation of causality

1. The self-*identity* of cause in its effect is the sublation of its power and negativity, hence a unity which is indifferent to differences of form, that is to say, *content*. – This content, therefore, refers to form (here causality) only *implicitly*. The two are thus posited as *diverse*, and with respect to content the form is itself a causality which is only immediately efficient, a
11.399 *contingent* causality.

Further, the content is as thus determined an internally diversified content; and the cause is determined in accordance with its content, and so is therefore also the effect. – The content, since reflectedness here is also immediate actuality, is to this extent *actual*, but *finite*, *substance*.

This is now the *relation of causality in its reality and finitude*. As formal, it is the infinite relation of absolute power, the content of which is pure

manifestation or necessity. As finite causality, on the contrary, it has a *given* content and, as an external difference, it runs its course here and there over it, this identical content which in its determination is one and the same substance.

Because of this *identity of content*, this causality is an *analytic* proposition. It is *the same fact* that comes up once as cause and then again as effect, in one case as something subsisting on its own and in the other as positedness or determination. Since these determinations of form are an *external reflection*, it is up to the *essentially* tautological consideration of a *subjective* understanding to determine an appearance as effect and to rise from it to its cause in order to comprehend and explain it. The same content is being repeated; there is nothing else in the cause which is not in the effect. – For instance, rain is the cause of wetness which is its effect; "the rain makes wet," this is an analytical proposition; the same water which is rain is wetness; as rain, this water is only in the form of a subject by itself; as wetness or moisture, it is on the contrary in adjectival form, something posited no longer meant to have a subsistence on its own; and the one determination, just like the other, is external to water. – Again, the cause of *this color* is a coloring agent, a *pigment* which is one and the same actuality, once in the form of an agent external to it, that is, is externally linked to an agent different from it; but again in the determination, equally external to it, of an effect. – The cause of an *act* is the inner intention of the subject who is the agent, and this intention is the same in content and value as the existence which it attains through the action. If the *movement* of a body is considered as effect, the cause of this effect is then a *propulsive* force; but it is the same quantum of movement which is present before and after the propulsion, the same concrete existence which the propulsive body contained and which it communicated to the one propelled; and what it communicated, it lost in equal measure.

The cause, say the painter or the propulsive body, does have *yet another content* than, in the case of the painter, the colors and the form combining **11.400**
these into a painting; and, in the other case, the movement of specific strength and direction. But this further content is a contingent side-being which has nothing to do with the cause; whatever other qualities the painter might possess besides being the painter of this painting, this does not enter into the painting; only those of his properties which are displayed in the *effect* are present in him *as cause*; as for the rest, he is not a cause. Likewise, whether the propulsive body is of stone or wood, green, yellow, and so on, all this does not enter into its propulsion and, to this extent, is not a cause.

It is worth noting in regard to *this tautology* of the relation of causality that the tautology does not seem to occur whenever it is not the proximate, but the *remote* cause which is at issue. The alteration of form which the basic fact undergoes as it passes through several middle terms hides the identity which it preserves across them. In this proliferation of causes introduced between it and the last effect, that fact is linked to other things and circumstances, so that it is not that first term, which is declared the cause, but all these several causes *together*, that contain the complete effect. – For instance, if a man developed his talents in circumstances due to the loss of his father who was hit by a bullet in battle, then this shot (or still further back, the war or some cause of the war, and on to infinity) could be adduced as the cause of the man's skillfulness. But it is clear that the shot, for one, is not the cause by itself but only in conjunction with the other efficient determinations. Or more precisely, the shot is not the cause at all, but only a single *moment* that pertained to the *circumstances of the possibility*.

But it is the *inadmissible application* of the relation of causality to *the relations of physico-organic and spiritual life* that must be noted above all. Here that which is called the cause does indeed show itself to be of a different content than the effect, *but this is because* anything that has an effect on a living thing is independently determined, altered, and transmuted by the latter, *for the living thing will not let the cause come to its effect*, that is, it sublates it as cause. Thus it is inadmissible to say that nourishment is the *cause* of blood, or that such and such a dish, or chill and humidity, are the *causes* of fever or of what have you; it is equally inadmissible to give the Ionic climate as *the cause* of Homer's works, or Caesar's ambition as the *cause* of the fall of Rome's republican constitution. In *history* in general there are indeed spiritual masses and individuals at play and influencing each other; but it is of the nature of spirit, in a much higher sense than it is of the
11.401 character of living things, that it will not *admit another originative principle within itself*, or that it will not let a cause continue to work its causality in it undisturbed but will rather interrupt and transmute it. – But these relations belong to the *idea*, and will come up for discussion then. – This much can still be noted here, namely that in so far as the relation of cause and effect is admitted, albeit in an inappropriate sense, the effect cannot be *greater* than the cause. It has become a common witticism in history to let *great effects* arise *from small causes* and to cite as the first cause of an event of far-reaching and profound consequence an *anecdote*. Any such so-called first cause is to be regarded as no more than an *occasion*, an *external stimulus*, of which the *inner spirit* of the event had no need, or could have

used a countless number of others, in order to make its first appearance, to give itself a first breath and announce itself. The converse is rather the case. It is *by the spirit* that any such triviality and contingency is *determined in the first place* to be the occasion of spirit. Historical *arabesques* that draw a full-blown figure out of a slender stalk are no doubt an ingenious, but highly superficial, practice. It is true that in the rise of the great out of the small we witness everywhere the conversion that spirit works on the external; but precisely for this reason the external is not the *cause within spirit*; rather, that conversion itself sublates the relation of causality.

2. But this *determinateness* of the relation of causality, that content and form are different and indifferent to each other, extends further. The *determination of form* is also *content determination*; cause and effect, the two sides of the relation, are therefore also *another content*. Or the content, because it is only as the content of a form, has the difference of this form within it and is essentially different. But this form of the content is the relation of causality, which is a content identical in cause and the effect, and consequently the different *content* is *externally connected*, on the one hand *with the cause* and on the other *with the effect*; hence the content itself *does not enter into the effective action* and into the *relation*.

This external content is therefore relationless – an *immediate concrete existence*, or because it is as content the *implicit* identity of cause and effect, it is also *immediate*, *existent* identity. This content is, therefore, *anything at all* which has manifold determinations of its existence, *among them* also this, that it is in *some respect or other* cause or also effect. In it, the form determinations of cause and effect have their *substrate*, that is to say, their essential subsistence – and each has a particular subsistence (since their identity is their subsistence); but it is a subsistence which is at the same time immediate, not their subsistence as unity of form or as relation. **II.402**

But this thing is not only substrate but also substance, for it is identical subsistence only *as subsistence of the relation*. Moreover, the substance is *finite* substance, for it is determined as immediate *over against* its causality. But it has causality at the same time, for it is just as much an identity as this relation.[21] – Now this substrate is, as cause, negative reference to *itself*. But this "itself" to which it refers is, *first*, a positedness because it is determined as *immediately* actual; this positedness, as content, is any determination whatever. – *Second*, *causality* is external to the substrate and *itself constitutes*, *therefore*, *its positedness*. Now since it is causal substance, its causality consists in negatively referring itself to itself, hence to its positedness and external

[21] *sie eben so sehr nur das Identische als dieses Verhältnis ist.*

causality. The effective action of this substance thus begins from something external, frees itself from this external determination, and its turning back into itself is the preservation of its immediate concrete existence and the sublation of the one which is posited, and consequently of its causality as such.

Take a stone that moves. It is a cause. Its movement is a determination which it has. But, besides it, it contains yet many other determinations (color, shape, and so on) that do not enter into its causality. Because its immediate concrete existence is separated from its form-connection, namely the form of causality, the latter is something external; the stone's movement and the causality attaching to it is in it only *positedness*. – But the causality of the stone is also *the stone's own causality*, as follows from the fact that its substantial subsistence is the stone's identical self-reference, but that this is now determined as positedness and is therefore at the same time *negative* self-*reference*. – Its causality, which is directed against itself as a positedness or as an externality, consists therefore in sublating this and through *its removal* in returning to itself – to this extent, therefore, in *not* being self-identical *in its positedness* but only in restoring *its originariness*. – Or again, rain is the cause of wetness, which is the same water as the rain. This water has the determination of being rain and cause because this determination has been posited in it by another; another force, or what have you, has lifted it into the air and compressed it into a mass, the weight of which makes it fall. Its being removed from the earth is a determination alien to its original self-identity, to its gravity; its causality consists in removing such determination and in restoring its original identity; but this means also sublating its causality.

We now consider the *second determinateness* of causality which concerns *form*; this relation is *causality external to itself*, as the *originariness* which is within just as much *positedness* or *effect*. This union of opposite determination *in an existent substrate* constitutes the *infinite regress* from cause to
II.403 cause. – We start from an effect; the latter has as effect a cause; but this cause has a cause in turn, and so on. Why does the cause have a cause in turn? That is to say, why is *the same side* which was previously determined *as cause* now determined as *effect* and therefore demands a new cause? – Because the cause is *something finite*, *a determinate* in general; determined as one moment of the form as against the effect; so it has its determinateness or negation outside it; but for this very reason it is itself *finite*, has *its determinateness within it* and is thereby *positedness* or *effect*. Its identity as this positedness is also posited, but it is a *third term*, the immediate substrate; causality is therefore external to itself, because *its originariness* is here

an *immediacy*. The difference of form is therefore a *first determinateness*, not yet determinateness *posited as determinateness*; it is *existent otherness*. Finite reflection, on the one hand, stops short at this immediate, removes the unity of form from it and makes it be cause *in one respect* and effect *in another*; on the other hand, it transfers the unity of form into the *infinite*, and through the endless progression expresses its impotence in attaining and holding fast to this unity.

Exactly the same is the case of the *effect*, or rather the *endless progression from effect to effect* is one and the same as the *regression from cause to cause*. Just as in the latter a *cause* becomes an *effect* which has *another* cause in turn, so too, conversely, the *effect* becomes a *cause* which has *another* effect in turn. – The determinate cause under consideration begins from an externality and returns in its effect back to itself, but not *as cause*; on the contrary, it loses its causality in that process. But, conversely, the effect arrives at a substrate which is substance, an original self-referring subsistence; in it, therefore, that positedness *becomes a positedness*, that is to say, this substance, as the effect is posited in it, *behaves as cause*. But that first effect, the positedness that accrues to the substance *externally*, is *other* than the second which the substance *produces*; for this second effect is determined as the *immanent reflection* of substance whereas the first is in it as an *externality*. – But because causality is here causality external to itself, it also equally *fails* to return in its effect back to itself but becomes therein *external* to itself; *its* effect becomes again a positedness in a substrate – as in *another substance* which however equally makes this positedness into a positedness, in other words, manifests itself as cause, again repels its effect from itself, and so on, into bad infinity. **II.404**

3. We now have to see what has resulted from the movement of determinate causality. – Formal causality expires in the effect and the element of *identity* of these two moments *emerges* as a result, but it does so only *as an implicit* unity of cause and effect to which the form connection is external. – For this reason, the element of identity is *immediate* also with respect to both of the two determinations of immediacy, *first* as *in-itself*, as a *content* on which causality is deployed externally; *second*, as a *concrete existent* substrate in which cause and effect *inhere* as different determinations of form. In this substrate, the two determinations are *implicitly* one, but, on account of this *implicitness* or of the externality of form, each is external to itself and hence, in its *unity* with the other, is also determined as *other* with respect to it. Consequently, the cause has indeed an effect *and is at the same time itself effect*; and the effect not only *has* a cause but *is itself also cause*. But the effect which the cause *has*, and the effect *which it is*, are

different – as are also the cause which the effect *has* and the cause *which it is*.

The outcome of the movement of the determinate relation of causality is then this, that the cause *does not just expire* in the effect, and thereby the effect as well, as in formal causality, but that *by expiring* in the effect the cause *comes to be* again; that the effect *vanishes* in the cause, but equally *comes to be* again in it. Each of these determinations *sublates itself in its positing*, and *posits itself in its sublating*; what we have is not an *external transition* of causality from one substrate to another, but its *becoming-other* is at the same time its *own positing*. Causality thus *pre-supposes* itself or *conditions itself*. The previously only *implicit identity*, the substrate, is therefore now *determined as presupposition* or *posited as against the efficient* causality, and the *reflection hitherto only* external to the identity is now *in relation* to it.

c. Action and reaction

Causality is a *presupposing* activity. The cause is *conditioned*; it is a negative reference to itself as a presupposed, as an external other which *in itself*, but only *in itself*, is causality itself. This other is, as we have seen,[22] *the substantial identity* into which formal causality passes over, which now has determined itself *as against this causality* as its negative. Or it is the same as the substance of the causal relation, but a substance which is confronted by the power
11.405 of accidentality as itself *substantial activity*. – It is the *passive* substance. – *Passive* is that which is immediate, or which exists-in-itself but is not also *for itself* – pure being or essence in just this determinateness of *abstract self-identity*. – Confronting the passive substance is the negatively self-referring substance, the *efficient* substance. It is cause inasmuch as in determinate causality it has restored itself out of the effect through the negation of itself – a reflected being[23] which in its otherness or as an immediate behaves essentially as a *positing activity* and through its negation mediates itself. Here, therefore, causality no longer has a *substrate* in which it *inheres*; it is not a determination of form as against this identity but is itself substance, or in other words, causality alone is at the origin. – The substrate is the passive substance which causality has presupposed for itself.

This cause now *acts*, for it is the negative power *over itself*; at the same time it is its own *presupposition*; thus it acts upon itself as *upon an other*,

[22] Cf. above, 11.398.

[23] "a reflected being" is added by Lasson. Hegel's sentence does not otherwise parse.

upon *the passive substance*. – Hence, it *first sublates the otherness* of this substance and returns in it back to itself; *second*, it *determines* this same substance, posits this sublation of its otherness or the substance's turning back into itself as a *determinateness*. This positedness, because it is at the same time the substance's turning back into itself, is at first *its effect*. But conversely, because as presupposing it determines itself as its other, it then posits the effect in this *other*, in the passive substance. – Or again, because the passive substance is itself this *double* – namely a self-subsistent *other*, and at the same time something *presupposed* and already implicitly identical with the efficient cause – because of this, the action of the passive substance is therefore itself double. It is at once both the sublation of its *determinateness*, namely of its condition, or the sublation of the self-subsistence of the passive substance; and also, in sublating its identity as it sublates this substance, the *pre-supposing* of itself, that is, the *positing or supposing* of itself as *other*. – Through this last moment, the passive substance is *preserved*; that first sublation of it appears in this respect at the same time also in this way, namely that *only some determinations* are sublated in it, and its identity in the effect with the efficient cause occurs in it externally.

To this extent it suffers *violence*. – Violence is *the appearance of power*, or *power as external*. But power is something external only in so far as in its action, that is, in the positing of itself, the causal substance is at the same time a presupposing, that is, posits itself as sublated. Conversely, the act of violence is therefore equally an act of power. The violent cause acts only on an other which it presupposes; its effect on it is its negative *self*-reference, or the manifestation of *itself*. The passive is the self-subsistent which is only a *posited*, something internally fractured – an actuality which is condition, though a condition that now is in its truth as an actuality that is only a **11.406**
possible, or, conversely, an *in-itself* that is only the *determinateness of the in-itself*, is only passive. To that which suffers violence, therefore, not only is it possible to do violence, but violence must be done to it; that which has dominion over an other, only has it because its power is that of the other, a power which in that dominion manifests both itself and the other. Through violence the passive substance is only *posited* as what it is *in truth*, namely, that because it is the simple positive or the immediate substance, for that very reason it is only something *posited*; the "*pre-*"[24] that it has as condition is the reflective shine of immediacy that the efficient causality strips off from it.

[24] *das Voraus*.

Passive substance, therefore, is only given its due by the action on it of another power. What it *loses* is the *immediacy* it had, the substantiality *alien to it*. What *comes to it* as *an alien something*, namely that it is determined as a *positedness*, is its own determination. – But now in being determined in its positedness, or *in its own* determination, the result is that it is not sublated but rather that it *only rejoins itself* and *in its being determined* is, therefore, an *originariness*. – On the one hand, therefore, the passive substance is *preserved* or *posited* by the active, namely in so far as the latter sublates itself; but, on the other hand, it is *the act of the passive substance itself* to rejoin itself and thus to make itself into what is originary and a *cause. The being posited* by an other and its own *becoming* are one and the same.

Now, because the passive substance has been converted into a cause, it follows, *first*, that the effect is sublated in it; therein consists its *reaction* in general. As passive substance, it is *in itself* as positedness; also, positedness has been *posited* in it by the other substance, namely in so far as it received its *effect* within it. Its reaction contains, therefore, a twofold aspect. For one, what it is *in itself* is *posited*. And two, what it is as *posited* displays itself as its *in-itself*; it is positedness *in itself*, hence through the other substance it receives an effect within; but, conversely, this positedness is *its* own in-itself, it is thus *its own* effect, it itself displays itself as a cause.

Second, the reaction is directed at *the first efficient cause*. For the effect which the hitherto passive substance sublates within itself is precisely the effect of that other cause. But a cause has its substantial actuality only in its effect; inasmuch as this effect is sublated, so is also the causal substantiality of the other cause. This happens first *in itself through itself*, in that the cause makes itself into an effect; its negative determination disappears in this identity and the cause becomes passive; and, second, it happens *through the hitherto passive*, but now reacting substance, which sublates its
II.407 effect. – Now in *determinate causality* the substance acted upon becomes a cause, for it acts *against* the positing of an *effect* in it. But it did not react *against the cause of that effect* but posited its effect rather in *another* substance, and thus there arose the progression to infinity of effects – for here the cause is only *implicitly* identical with itself in the effect, and hence, on the one hand, it expires into an *immediate* identity as it comes to *rest*, but, on the other hand, it revives in *another* substance. – In conditioned causality, on the contrary, the cause *refers back to itself* in the effect, for the latter is as a condition, as a *presupposition*, its other, and its act is therefore just as much a *becoming* as a positing and sublating of *the other*.

Further, causality behaves in all this as passive substance; but, as we have seen,[25] the latter *becomes* causal through the effect it incurs. That first cause, the one which acts first and receives its effect back into itself as a reaction, thus comes up again as a cause, whereby the *activity* which in finite causality runs into the bad infinite progression is *bent around* and becomes an action that returns to itself, an infinite *reciprocal action*.

c. reciprocity of action

In finite causality it is substances that actively relate to each other. *Mechanism* consists in this *externality* of causality, where the cause's *reflection* in its effect *into itself* is at the same time a repelling *being*, or where, in the *self-identity* which the causal substance has in its effect, the substance is equally immediately *external* to itself and the effect is *transposed into another substance*. In reciprocity of action this mechanism is now sublated, for it contains *first* the *disappearing* of that original *persistence* of *immediate* substantiality; *second*, the *coming to be* of the *cause*, and hence *originariness mediating* itself with itself through its *negation*.

At first, the reciprocity of action takes on the form of a reciprocal causality of *substances* that are *presupposed* and that *condition each other*; each is with respect to the other *both* active *and* passive *substance*. Since the two are thus passive and active at once, their difference is thereby already sublated; it is a totally transparent reflective shine; they are substances only in being the identity of the active and the passive. The reciprocity of action is itself, therefore, only a still *empty way and manner*, and all that is still needed is merely the external bringing together of what is already there, both *in itself* and as *posited*. First of all, it is no longer *substrates* that are referred to each other but substances; in the movement of conditional causality, the still left over *presupposed immediacy* has been sublated, and *what conditions* the causing activity is only *an influence*, or *its own passivity*. But this influence, moreover, does not come from *another* substance originating it but from precisely a causality which is conditioned by influence, or one which is *mediated*. This at first *external factor* that accrues to the cause and constitutes the side of its passivity is therefore mediated *through the causality itself*, is produced through its own activity and is, consequently, a *passivity posited by its own very activity*. – Causality is conditioned and conditioning. As *conditioning*, it is *passive*; but it is equally so as *conditioned*. This conditioning or passivity is the *negation* of the cause through itself in

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[25] In the preceding page, 11.406.

that it makes itself essentially into an *effect* and is cause precisely for that reason. *Reciprocity of action* is, therefore, only causality itself; the cause does not just *have* an effect but, in the effect, refers *as cause* back to itself.

Causality has thereby returned to *its absolute concept* and has at the same time attained the *concept* itself. At first, it is real necessity, absolute self-identity in which the difference between it and the determinations referring to each other within it are substances, *free actualities*, over against one another. Necessity is in this way *inner identity*; causality is the manifestation of it in which its reflective shine *of substantial otherness* has been sublated, and necessity is elevated to *freedom*. – In the reciprocity of action, originative causality displays itself as *arising* from its negation, from passivity, and as *passing away* into it, as a *becoming*, but in such a way that this becoming is at the same time equally only *shining*; the transition into *otherness* is reflection-into-itself; *negation*, which is the ground of the cause, is its positive *rejoining* with itself.

In the reciprocity of action, therefore, necessity and causality have disappeared; they contain both the *immediate identity* as *combination* and *reference* and the *absolute substantiality of the differences*, consequently their *contingency*, the original *unity* of substantial *difference* and therefore the absolute contradiction. Necessity is being, *because* being is; it is the unity of being with itself that has itself as *ground*, but, conversely, because this being has a ground, it is not being; it is simply and solely *reflective shining*, *reference* or *mediation*. Causality is this *posited* transition of original
11.409 being, of *cause*, into reflective shine or mere *positedness*, and, conversely, of positedness into originariness; but the *identity itself* of being and reflective shine still is the *inner* necessity. This *inwardness* or this in-itself sublates the movement of causality; the result is that the substantiality of the sides that stand in relation is lost, and necessity unveils itself. Necessity does not come to be *freedom* by vanishing but in that its still only *inner* identity is *manifested*, and this manifestation is the identical movement immanent to the different sides, the immanent reflection of shine as shine. – Conversely, *contingency* thereby comes to be *freedom* at the same time, for the sides of necessity, which have the shape of independent, free actualities that do not reflectively shine into each other, *are now posited as an identity*, so that now these totalities of immanent reflection, in their differences, also *shine as identical*, in other words, they are also posited as only one and the same reflection.

No longer, therefore, does absolute substance as self-differentiating absolute form repel itself as necessity from itself, nor does it fall apart as *contingency* into indifferent, external substances, but, on the contrary, it

differentiates itself: *on the one hand*, into the totality (the heretofore passive substance) which is at the origin, as the reflection from internal determinateness, as simple whole that contains its *positedness* within itself and *in this positedness is posited as self-identical* – this is *the universal* –; *on the other hand*, into the totality (the hitherto causal substance) which is the reflection, equally from internal determinateness, into the negative determinateness which, just as the *self-identical determinateness*, equally is the whole, but posited as the *self-identical negativity* – the singular. But, because the *universal* is self-identical only in that the *determinateness* that it holds within is *sublated*, hence it is the negative as negative, it immediately is *the same negativity* that *singularity* is. And the singularity, because it equally is the determinedly determined, the negative as negative, immediately is *the same identity* that *universality* is. This, their *simple* identity, is the *particularity* that, from the singular, holds the moment of *determinateness*; from the universal, that of immanent *reflection* – the two in immediate unity. These three totalities are therefore one and the same reflection that, as *negative self-reference*, differentiates itself into the other two totalities – but as into a *perfectly transparent difference*, namely into the *determinate simplicity*, or into the *simple determinateness*, which is their one same identity. – This is the *concept*, the realm of *subjectivity* or of *freedom*.

VOLUME TWO

The Science of Subjective Logic or The Doctrine of the Concept

12.5

FOREWORD

This part of the Logic which contains the *Doctrine of the Concept* and constitutes the third part of the whole is also issued under the particular title of *System of Subjective Logic*. This is for the convenience of those friends of this science who, of the materials covered by logic commonly so called, normally take a greater interest in those treated here than in the first two parts. – For these earlier parts I could claim the indulgence of the fair critic because of the dearth of previous work that could have afforded me some support, the materials and a guide on how to proceed. In the case of the present part, I can rather claim this indulgence for the opposite reason; for there already exists for the logic of the *concept* a fully ready and well-entrenched, one may even say ossified, material, and the task is to make it fluid again, to revive the concept in such a dead matter. To build a new city in a devastated land has its difficulties, even if there is no lack of material at hand; but even greater are the obstacles, of a different kind, when the task is to give a new layout to an ancient and solidly constructed city, with established rights of ownership and domicile; one must also decide, among other things, not to make use of much otherwise valued stock. –

But above all, it is the greatness of the subject matter itself that may be adduced as an excuse for the imperfection in execution. For what subject matter is there for cognition more sublime than *truth* itself? – Yet there is no escaping the doubt that it is this very subject matter that needs excuse when the sense in which Pilate put the question, "What is truth?," comes to mind, uttering it as he did, in the words of the poet, " . . . with the courtier's mien that myopically yet smiling damns the cause of the earnest soul."[1] Pilate's 12.6
question then carries the meaning, which we may view as a moment of politeness, together with its reminder, that the goal of discovering the truth

[1] Friedrich Gottlieb Klopstock, *Der Messias*, seventh canto (slightly modified by Hegel who very likely cited from memory).

is, as everyone knows, something that has been given up, long since set aside with a shrug; that the unattainableness of truth is recognized also by philosophers and professional logicians. – But if in our times the question raised in *religion* regarding the value of things, of insights and actions – a question that in content carries the same implication as Pilate's – is once more reclaiming its rightful meaning, then philosophy can well hope that it will no longer occur as so strange if it too once more begins to reassert its goal in its immediate domain, and that, after having lapsed into the ways of other sciences in renouncing truth, once more strives to rise up to that goal. There is no excuse needed for this attempt; but as for the execution of it, I may plead as excuse my official duties and other personal circumstances that have allowed me to work but interruptedly at a science that demands instead, and deserves, undistracted and undivided exertion.

12.11 Nürnberg, July 21, 1816

OF THE CONCEPT IN GENERAL

What *the nature of the concept is* cannot be given right away, not any more than can the concept of any other subject matter. It might perhaps seem that, in order to state the concept of a subject matter, the logical element can be presupposed, and that this element would not therefore be preceded by anything else, or be something deduced, just as in geometry logical propositions, when they occur applied to magnitudes and employed in that science, are premised in the form of *axioms*, *underived and underivable* determinations of cognition. Now the concept is to be regarded indeed, not just as a subjective presupposition but as *absolute foundation*; but it cannot be the latter except to the extent that it has *made* itself into one. Anything abstractly immediate is indeed a *first*; but, as an abstraction, it is rather something mediated, the foundation of which, if it is to be grasped in its truth, must therefore first be sought. And this foundation will indeed be something immediate, but an immediate which has made itself such by the sublation of mediation.

From this aspect the *concept* is at first to be regarded simply as the *third* to *being* and *essence*, to the *immediate* and to *reflection*. Being and essence are therefore the moments of its *becoming*; but the concept is their *foundation* and *truth* as the identity into which they have sunk and in which they are contained. They are contained in it because the concept is their result, but no longer as *being* and *essence*; these are determinations which they have

only in so far as they have not yet returned into the identity which is their unity.

Hence the *objective logic*, which treats of *being* and *essence*, constitutes in truth the *genetic exposition of the concept*. More precisely, *substance* already is *real essence*, or *essence* in so far as it is united with *being* and has stepped into actuality. Consequently, the concept has substance for its immediate presupposition; substance is *implicitly* what the concept is *explicitly*. The *dialectical movement* of *substance* through causality and reciprocal affection is thus the immediate *genesis of the concept* by virtue of which its *becoming* is displayed. But the meaning of its *becoming*, like that of all becoming, is **12.12** that it is the reflection of something which passes over into its *ground*, and that the at first apparent *other* into which this something has passed over constitutes the *truth* of the latter. Thus the concept is the *truth* of substance, and since *necessity* is the determining relational mode of substance, *freedom* reveals itself to be the *truth of necessity* and *the relational mode of the concept*.

The necessary forward course of determination characteristic of substance is the *positing* of that which is *in and for itself*. The concept is now this absolute unity of *being* and *reflection* whereby *being-in-and-for-itself* only is by being equally *reflection* or *positedness*, and *positedness* only is by being equally *in-and-for-itself*. – This abstract result is elucidated by the exposition of its concrete genesis which contains the nature of the concept but had to precede its treatment. We must briefly sum up here, therefore, the main moments of this exposition (which has been treated in detail in Book Two of the Objective Logic).

Substance is the *absolute*, the actual in-and-for-itself: *in itself*, because it is the simple identity of possibility and actuality; absolute, because it is the essence containing all actuality and possibility *within itself*; *for itself*, because it is this identity as absolute *power* or absolutely self-referring *negativity*. – The movement of substantiality posited by these moments consists in the following stages:

1. Substance, as absolute power or self-referring *negativity*, differentiates itself into a relation in which what are at first only simple moments are *substances* and original *presuppositions*. – Their specific relation is that of a *passive* substance, of *the originariness of the simple* in-itself which, powerless to posit itself, is only originary positedness, and of an *active* substance, the *self-referring* negativity which has as such posited itself as an other and refers *to it*. This other is precisely the passive substance which the active substance, as originative power, has *presupposed* for itself as its condition. – This presupposing is to be understood in the sense that the movement of substance is at first in the form of one moment of

its concept, that of the *in-itself* – that the determinateness of one of the *substances* standing in relation is itself also the determinateness of this *relation*.

2. The other moment is the *being-for-itself* or the power positing *itself as self*-referring negativity and thereby again sublating *what it presupposes*. – The active substance is *cause*; it *acts*; this means that it is now a *positing*,
12.13 just as before it was a *presupposing*, that (a) power is also given the *reflective shine* of power, positedness also the *reflective shine* of positedness. What in the presupposition was the *originary* becomes in causality, *by virtue of the reference to an other*, what it is in itself. The cause brings about an effect. But it does so in another substance and it is now power *with reference to an other*; it thus *appears* as cause but *is* cause only by virtue of this *appearing*. – (b)[2] The effect enters the passive substance and by virtue of it the latter now also appears as *positedness*, but *is* passive substance only in this positedness.
3. But there is more still present here than just this *appearance*, namely:
   (a) the cause acts upon the passive substance, *alters* its determination; but this determination is its positedness, for otherwise there is nothing else to alter; the other determination which it obtains is however that of causality; the passive substance thus comes to be cause, power, and activity;
   (b) the effect is *posited* in it by the cause; but that which is posited by the cause is the cause itself which, in acting, is identical with itself; it is this cause that posits itself in the place of the passive substance.

Similarly, with respect to the active substance:

   (a) the action is the translation of the cause into the effect, into its *other*, the positedness;
   (b) the cause reveals itself in the effect as what it is; the effect is identical with the cause, is not an other; in acting the cause thus reveals the positedness to be that which it (the cause) essentially is.

Each side, therefore, in accordance with how it *refers to the other* both as identical with it and as the negative of it, becomes the *opposite* of itself, but, in becoming this opposite, the other, and therefore also each, remains *identical with itself*. – But both, the identical and the negative reference, are one and the same; substance is self-identical only in its opposite and this constitutes the absolute identity of the two substances posited as two. It is by its act that active substance is manifested as cause or originary substantiality, that is, by positing itself as the opposite of

[2] The (b) is added by Lasson.

itself, a positing which is at the same time the sublating of its *presupposed otherness*, of passive substance. Contrariwise, it is by being acted upon that the positedness is manifested *as* positedness, the negative *as* negative, and consequently the passive substance as *self-referring* negativity, and in this other the cause simply rejoins itself. Through this positing, therefore, what is *presupposed*, that is, the *implicit* originariness, becomes *explicit*; but this being, which is now in and for itself, is only by virtue of a positing which is equally the *sublation* of what is presupposed, or because the absolute substance has returned to itself only *out of*, and *in*, its *positedness* and for that reason is absolute. Hence this reciprocal action is appearance that **12.14** again sublates itself – the revelation that the *reflective shine* of causality, in which the cause is *as* cause, *is just that*, *that it is reflective shine*. This infinite immanent reflection – that the being-in-and-for-itself is only such by being a positedness – is the *consummation of substance*. But this consummation is no longer the *substance* itself but is something higher, the *concept*, the *subject*. The transition of the relation of substantiality occurs through its own immanent necessity and is nothing more than the manifestation of itself, that the concept is its truth, and that freedom is the truth of necessity.

Earlier, in Book Two of the Objective Logic (pp. 11.376ff., Remark), I have already called attention to the fact that the philosophy that assumes its position at the standpoint of *substance* and stops there is the *system of Spinoza*. I have also indicated there the *defect* of this system, both with respect to form and matter. Something else, however, is the *refutation* of it. Elsewhere,[3] in connection with the refutation of a philosophical system, I have also remarked quite in general that we must get over the distorted idea that that system has to be represented as if thoroughly *false*, and as if the *true* system stood to the false as *only opposed* to it. It is on the basis of the context within which the system of Spinoza is presented here that we can see its true standpoint and ask *whether the system* is true or false. The relation of substantiality was generated by the nature of *essence*; this relation and also its exposition as an expanded totality in the form of system is, therefore, a *necessary standpoint* at which the absolute positions itself. Such a standpoint, therefore, is not to be regarded as just an opinion, an individual's subjective, arbitrary way of representing and thinking, as an aberration of speculation; on the contrary, speculation necessarily runs into it and, to this extent, the system is perfectly true. – But it *is not the highest standpoint*. By itself alone, therefore, the system cannot be regarded as false,

[3] In the *Phenomenology of Spirit*, cf. GW 9, 10.

as either requiring or being capable of *refutation*. This alone is rather to be considered *false* in it: that it would be the highest standpoint. It also follows that the *true* system cannot be related to it as just its *opposite*, for as so opposed it would itself be one-sided. Rather, as the higher system, it must contain it within as its subordinate.

Further, any refutation would have to come not from outside, that is, not proceed from assumptions lying outside the system and irrelevant to it. The system need only refuse to recognize those assumptions; the *defect* is such only for one who starts from such needs and requirements as are based on
12.15 them. For this reason it has been said that there cannot be any refutation of Spinozism for anyone who does not presuppose a commitment to freedom and the independence of a self-conscious subject.[4] Besides, a standpoint so lofty and inherently so *rich* as that of the relation of substance does not ignore those assumptions but even contains them: one of the attributes of the Spinozistic substance is *thought*. The system knows how to resolve and assimilate the determinations in which these assumptions conflict with it, so that they re-emerge *in it*, but duly modified accordingly. The nerve, therefore, of any external refutation consists solely in obstinately clinging to the opposite categories of these assumptions, for example, to the absolute self-subsistence of the thinking individual as against the form of thought which in the absolute substance is posited as identical with extension. Effective refutation must infiltrate the opponent's stronghold and meet him on his own ground; there is no point in attacking him outside his territory and claiming jurisdiction where he is not. The only possible refutation of Spinozism can only consist, therefore, in first acknowledging its standpoint as essential and necessary and then raising it to a higher standpoint *on the strength of its own resources*. The relation of substantiality, considered simply *on its own*, leads to its opposite: it passes over into the *concept*. The exposition in the preceding Book of substance as leading to the *concept* is, therefore, the one and only true refutation of Spinozism. It is the *unveiling* of substance, and this is the *genesis of the concept* the principal moments of which we have documented above. – The *unity* of substance is its relation of *necessity*. But this unity is thus only *inner necessity*. By *positing itself* through the moment of absolute negativity, it becomes *manifested* or *posited identity*, and also, therefore, the *freedom* which is the identity of the concept. This concept, the totality resulting from the relation of reciprocity, is the unity of the *two substances* that stand in that relation,

[4] The allusion is, among others, to Fichte. See the whole §5 of the *(First) Introduction to the Wissenschaftslehre*, English trans., pp. 15ff. GA I.2.191ff.

but in such a way now that the two belong to freedom: they no longer possess their identity blindly, that is to say, *internally*; on the contrary, the substances now explicitly have the determination that they are essentially *reflective shine* or moments of reflection, and for that reason that each has immediately rejoined its other or its positedness, that each contains this positedness in *itself* and in its other, therefore, is posited simply and solely as identical with itself.

In the *concept*, therefore, the kingdom of *freedom* is disclosed. The concept is free because the *identity that exists in and for itself* and constitutes the necessity of substance exists at the same time as sublated or as *positedness*, and this positedness, as self-referring, is that very identity. Vanished is the **12.16** obscurity which the causally related substances have for each other, for the originariness of their self-subsistence that makes them causes[5] has passed over into positedness and has thereby become self-transparently *clear*; the "*originary fact*"[6] is "originary" because it is a "*self-causing fact*,"[7] and this is the *substance that has been let go freely into the concept*.

The direct result for the concept is the following more detailed determination. Because being which is in and for itself is immediately a *positedness*, the concept is in its simple self-reference an absolute *determinateness* which, by referring only to itself, is however no less immediately simple identity. But this *self-reference* of the determinateness in which the latter *rejoins* itself is just as much *the negation of determinateness*,[8] and thus the concept, as this equality with itself, is the universal. But this identity equally has the determination of negativity; it is a negation or determinateness that refers to itself and as such the concept is the *singular*.[9] Each, the universal and the singular, is a totality; each contains the determination of the other within it and therefore the two are just as absolutely *one* totality as their oneness is the diremption of its self into the free reflective shine of this duality. And this is a duality which in the differentiation of *singular* and *universal* appears to be perfect opposition, but an opposition which is so much of *a reflective shine* that, in that the one is conceptualized and said, immediately the other is therein conceptualized and said.

[5] I have glossed "that makes them causes" to bring out Hegel's play on words which is otherwise lost in English. "Cause" in German is *Ursache*, where the *ur-* indicates originariness. "Originariness" is *Ursprünglichkeit*.

[6] *Die ursprüngliche Sache*. Cf. *Ursache*, i.e. "cause." [7] *Ursache ihrer selbst*.

[8] The determinateness does not go past itself, even excludes the possibility of going past itself. In this sense, because it precludes reference to anything else besides itself, it ceases to be a determinateness and becomes a universal. It negates its own determinateness, i.e. itself as negation.

[9] In precluding reference to anything besides itself, the universal regains negativity. It is just itself and nothing else. In this sense, it is a universe by itself, a singular.

The foregoing is to be regarded as the *concept of the concept*. To some it may seem to depart from the common understanding of "concept," and they might require that we indicate how our result fits with other ways of representing or defining it. But, for one thing, this cannot be an issue of proof based on the *authority* of ordinary understanding. In the science of the concept, the content and determination of the latter can be proven solely on the basis of an *immanent deduction* which contains its genesis, and such a deduction lies behind us. And also, whereas the concept of the concept as deduced here should in principle be recognized in whatever else is otherwise adduced as such a concept, it is not as easy to ascertain what others have said about its nature. For in general they do not bother at all enquiring about it but presuppose that everyone already understands what the concept means when speaking of it. Of late especially one may indeed believe that it is not worth pursuing any such enquiry because, just as it was for a while the fashion to say all things bad about the imagination,
12.17 then about memory, it became in philosophy the habit some time ago, and is still the habit now, to heap every kind of defamation on the *concept*, to hold it in contempt – the concept which is the highest form of thought – while the *incomprehensible* and the *non-comprehended* are regarded as the pinnacle of both science and morality.

I confine myself to one remark which may contribute to the comprehension of the concept here developed and facilitate one's way into it. The concept, when it has progressed to a concrete existence which is itself free, is none other than the "I" or pure self-consciousness. True, I *have* concepts, that is, determinate concepts; but the "I" is the pure concept itself, the concept that has come into *determinate existence*. It is fair to suppose, therefore, when we think of the fundamental determinations which constitute the nature of the "I," that we are referring to something familiar, that is, a commonplace of ordinary thinking. But the "I" is *in the first place* purely self-referring unity, and is this not immediately but by abstracting from all determinateness and content and withdrawing into the freedom of unrestricted equality with itself. As such it is *universality*, a unity that is unity with itself only by virtue of its *negative* relating, which appears as abstraction, and because of it contains all determinateness within itself as dissolved. *In second place*, the "I" is just as immediately self-referring negativity, *singularity*, *absolute determinateness* that stands opposed to anything other and excludes it – *individual personality*. This absolute *universality* which is just as immediately absolute *singularization* – a being-in-and-for-itself which is absolute positedness and *being-in-and-for-itself* only by virtue of its unity with the *positedness* – this universality constitutes the

nature of the "I" and of the *concept*; neither the one nor the other can be comprehended unless these two just given moments are grasped at the same time, both in their abstraction and in their perfect unity.

When I say of the *understanding* that *I have it*, according to ordinary ways of speaking, what is being understood by it is a *faculty* or a *property* that stands in relation to my I in the same way as the property of a thing stands related to that *thing* – as to an indeterminate substrate which is not the true ground or the determining factor of the property. In this view, I *have* concepts, and I *have* the concept, just as I also have a coat, complexion, and other external properties. – Kant went beyond this external relation of the understanding, as the faculty of concepts and of the concept, to the "I." It is one of the profoundest and truest insights to be found in the Critique of Reason that the *unity* which constitutes the *essence of the concept* is recognized as the *original synthetic* unity *of apperception*, the **12.18**
unity of the "*I think*," or of self-consciousness.[10] – This proposition is all that there is to the so-called *transcendental* deduction of the categories which, from the beginning, has however been regarded as the most difficult piece of Kantian philosophy – no doubt only because it demands that we should transcend the mere *representation* of the relation of the *"I" and the understanding*, or of the *concepts*, to a thing and its properties or accidents, and advance to the *thought* of it. – *The object*, says Kant in the *Critique of Pure Reason* (2nd edn, p. 137), is that, in the concept of which the *manifold* of a given intuition is *unified*. But every unification of representations requires a *unity of consciousness* in the *synthesis* of them. Consequently, this *unity of consciousness* is alone that which constitutes the reference of the representations to an object, hence their *objective validity*, and that on which even *the possibility of the understanding* rests. Kant distinguishes this objective unity from the *subjective unity* of consciousness by which the "I" becomes conscious of a manifold, whether *simultaneously* or *successively* depending on empirical conditions.[11] In contrast to this subjective unity, the principles of the *objective* determination of representations are only to be derived from the principle of the *transcendental unity of apperception*. It is by virtue of the categories, which are these objective determinations, that the manifold of given representations is so determined as to be brought to the *unity of consciousness*.[12] – On this explanation, the unity of the concept is that by virtue of which something is not the determination of *mere feeling*, is not *intuition* or even mere *representation*, but an *object*, and this objective unity is the unity of the "I" with itself. – In point of fact,

[10] B131ff. [11] B139. [12] B144.

the *conceptual comprehension* of a subject matter consists in nothing else than in the "I" making it *its own*, in pervading it and bringing it into *its own* form, that is, into a *universality* which is immediately *determinateness*, or into a determinateness which is immediately universality. As intuited or also as represented, the subject matter is still *something external*, *alien*. When it is conceptualized, the *being-in-and-for-itself* that it has in intuition and representation is transformed into a *positedness*; *in thinking* it, the "I" pervades it. But it is only in thought that it is *in and for itself*; as it is in intuition or representation, it is *appearance*. Thought sublates the *immediacy* with which it first comes before us and in this way transforms it into a *positedness*; but this, its *positedness*, is its *being-in-and-for-itself* or its *objectivity*. This is an objectivity which the subject matter consequently attains in the *concept*, and this concept is the *unity of self-consciousness* into which that subject matter has been assumed; consequently its objectivity
12.19 or the concept is itself none other than the nature of self-consciousness, has no other moments or determinations than the "I" itself.

Accordingly, we find in a fundamental principle of Kantian philosophy the justification for turning to the nature of the "I" in order to learn what the *concept* is. But conversely, it is necessary to this end that we have grasped the *concept* of the "I" as stated. If we cling to the mere *representation* of the "I" as we commonly entertain it, then the "I" is only the simple *thing* also known as the *soul*, a thing in which the concept *inheres* as a possession or a property. This representation, which does not bother to comprehend either the "I" or the concept, is of little use in facilitating or advancing the conceptual comprehension of the concept.

The position of Kant just cited contains two other points which concern the concept and necessitate some further comments. First of all, preceding the *stage* of *understanding* are the *stages of feeling and of intuition*.[13] It is an essential proposition of Kant's Transcendental Philosophy that *concepts without intuition are empty*, and that they have validity only as *references connecting* the *manifold* given by intuition.[14] Second, the concept is given as the *objective element* of cognition, consequently as the *truth*. Yet it is taken to be something *merely subjective*, and we are not allowed to extract *reality* from it,[15] for by reality objectivity is to be understood, since reality is contrasted with subjectivity. Moreover, the concept and anything logical are declared to be something merely *formal* which, since it abstracts from content, does not contain truth.

[13] Hegel now has in mind the Transcendental Aesthetic section of the *Critique of Pure Reason*.
[14] Cf. B33, B143. [15] The allusion is to A603/B631.

Now, *in the first place*, as regards *the relation of the understanding or concept to the stages presupposed by it*, the determination of the *form of these stages* depends on which science is being considered. In our science, which is pure Logic, they are *being* and *essence*. In Psychology, the stages preceding the understanding are *feeling* and intuition, and then *representation* generally. In the Phenomenology of Spirit, which is the doctrine of consciousness, the ascent to the understanding is made through the stages of *sensuous consciousness* and then of *perception*. Kant places ahead of it only feeling and intuition. But, for a start, he himself betrays the *incompleteness* of this progression of stages by *appending* to the Transcendental Logic or the Doctrine of the Understanding a *treatise on the concepts of reflection* – a sphere lying between *intuition* and *understanding*, or *being* and *concept*.[16]

And if we consider the substance itself of these stages, it must *first* be said that such shapes as *intuition*, *representation*, and the like, belong to **12.20**
the *self-conscious spirit* which, as such, does not fall within the scope of logical science. Of course, the pure determinations of being, essence, and the concept, also constitute the substrate and the inner sustaining structure of the forms of spirit; spirit, as *intuiting* as well as *sensuous consciousness*, is in the form of immediate being, just as spirit as *representational* and also *perceptual* consciousness has risen from being to the stage of essence or reflection. But these concrete shapes are of as little interest to the science of logic as are the concrete forms that logical determinations assume in nature. These last would be *space* and *time*, then space and time as assuming a content, as *inorganic and then organic nature*. Similarly, the concept is also not to be considered here as the act of the self-conscious understanding, not as *subjective understanding*, but as the concept in and for itself which constitutes a *stage of nature* as well as of *spirit*. Life, or organic nature, is the stage of nature where the concept comes on the scene, but as a blind concept that does not comprehend itself, that is, is not thought; only as self-aware and as thought does it belongs to spirit. Its logical form, however, is independent of such shapes, whether unspiritual or spiritual. This is a point which was already duly adumbrated in the Introduction,[17] and one that one must be clear about *before* undertaking *Logic*, not when one is already in it.

But, *in second place*, how the forms that precede the concept might ever be shaped depends on how the *concept is thought in relation to them*. This relation, as assumed in ordinary psychology as well as in Kant's Transcendental Philosophy,[18] is that the empirical *material*, the manifold

[16] A260/B316ff. [17] Cf. GW 11, 22ff., i.e. 21.35ff. [18] Cf. B133ff.

of intuition and representation, is at first *just there by itself*, and that the understanding then *comes* into it, brings *unity* to it, and raises it through *abstraction* to the form of *universality*. The understanding is in this way an inherently empty *form* which, on the one hand, obtains reality only by virtue of that *given* content, and, on the other, *abstracts* from it, that is to say, *discards it* as something useless, but useless only for the concept. In both operations, the concept is not the one which is independent, is not what is essential and true about that presupposed material; rather, this material is the reality in and for itself, a reality that cannot be extracted from the concept.

Now it must certainly be conceded that the *concept* is *as such* not yet complete, that it must rather be raised to the *idea* which alone is the unity of the concept and reality; and this is a result which will have to *emerge* in what follows *from the nature of the concept itself*. For the reality that
12.21 the concept gives itself cannot be picked up as it were from the outside but must be derived from the concept itself in accordance with scientific requirements. But the truth is that it is not the material given by intuition and representation which must be validated as the *real* in contrast to the concept. "It is only a concept," people are wont to say, contrasting the concept, as superior to it, not only with the idea, but with sensuous, spatial and temporal, palpable existence. For this reason the *abstract* is then held to be of less significance than the concrete, because so much of this palpable material has been removed from it. In this view, to abstract means to select from a concrete material *this or that mark*, *but only for our subjective purposes*, without in any way detracting from the *value* and the *status* of the many other *properties* and *features* that are left out; on the contrary, by retaining them as *reality*, but yonder on the other side, still as fully valid as ever. It is only because of its *incapacity* that the understanding thus does not draw from this wealth and is forced rather to make do with the impoverished abstraction. But now, to regard the given material of intuition and the manifold of representation as the real, in contrast to what is thought and the concept, is precisely the view that must be given up as condition of philosophizing, and that religion, moreover, presupposes as having already been given up. How could there be any need of religion, how could religion have any meaning, if the fleeting and superficial appearance of the sensuous and the singular were still regarded as the truth? But it is philosophy that yields the *conceptually comprehended*[19] insight into the status of the reality of sensuous being. Philosophy assumes indeed that the

[19] "conceptually comprehended" = *begriffene*.

stages of feeling, intuition, sense consciousness, and so forth, are prior to the understanding, for they are the conditions of the genesis of the latter, but they are conditions only in the sense that the concept results *from their dialectic* and *their nothingness* and not because it is conditioned by their *reality*. Abstractive thought, therefore, is not to be regarded as the mere discarding of a sensuous material which does not suffer in the process any impairment of reality; it is rather the sublation and reduction of that material as mere *appearance* to the *essential*, which is manifested only *in the concept*. Of course, if what is to be taken up into the concept from the concrete appearance is intended to serve only as a *mark* or *sign*, then it may well be anything at all, any mere sensuous singular determination of the subject matter will do, selected from the others because of some external interest but of like kind and nature as the rest.

In this conjunction, the prevailing fundamental misunderstanding is that the *natural* principle, or the *starting point* in the *natural* development **12.22** or the *history* of an individual in the process of self-formation, is regarded as the *truth* and *conceptually the first*. Intuition or being are no doubt first in the order of nature, or are the condition for the concept, but they are not for all that the unconditioned in and for itself; on the contrary, in the concept their reality is sublated and, consequently, so is also the reflective shine that they had of being the conditioning reality. If it is not the *truth* which is at issue but only *narration*, as it is the case in pictorial and phenomenal thinking, then we might as well stay with the story that we begin with feelings and intuitions, and that the understanding then extracts a universal or an abstraction from their manifold, for which purpose it quite understandably needs a substrate for these feelings and intuitions which, in the process of abstraction, retains for representation the same complete reality with which it first presented itself. But philosophy ought not to be a narrative of what happens, but a cognition of what is *true* in what happens, in order further to comprehend on the basis of this truth what in the narrative appears as a mere happening.

If on the superficial view of what the concept is all manifoldness falls *outside it*, and only the form of abstract universality or of empty reflective identity stays with it, we can at once call attention to the fact that any statement or definition of a concept expressly requires, besides the genus which in fact is already itself more than just abstract universality, also a *specific determinateness*. And it does not take much thoughtful reflection on the implication of this requirement to see that *differentiation* is an equally essential moment of the concept. Kant introduced this line of reflection with the very important thought that there are synthetic judgments

a priori.[20] His original synthesis of apperception is one of the most profound principles for speculative development; it contains the beginning of a true apprehension of the nature of the concept and is fully opposed to any empty identity or abstract universality which is not internally a synthesis. – The further development, however, did not live up to this beginning. The term itself, "synthesis," easily conjures up again the picture of an *external* unity, of a *mere combination* of terms that are *intrinsically separate*. Then, again, the Kantian philosophy has never got over the psychological reflex of the concept and has once more reverted to the claim that the concept is permanently conditioned by the manifold of intuition. It has declared the content of the cognitions of the understanding, and of experience, to be *phenomenal*, not because of the finitude of the categories as such but, on the ground of a psychological idealism, because they are *only* determinations
12.23 derived from self-consciousness. Here accordingly we have again the supposition that apart from the manifoldness of intuition the concept is *without content*, *empty*, despite the fact that the concept is said to be a synthesis *a priori*; as such, it surely contains determinateness and differentiation within itself. And because this determinateness is the determinateness of the concept, and hence the *absolute determinateness*, *singularity*, the concept is the ground and the source of all finite determinateness and manifoldness.

The formal position that the concept never abandons as understanding is completed in Kant's exposition of what *reason* is. One should expect that in reason, which is the highest stage of thought, the concept would lose the conditionality with which it still appears at the stage of understanding and would attain perfect truth. But this expectation is disappointed. For Kant defines the relation of reason to the categories as merely *dialectical*. Indeed, he even takes the result of this dialectic to be simply and solely an *infinite nothingness*, the result being that the synthesis is again lost, lost also to the infinite unity of reason, and lost with it is whatever beginning there was of a speculative, truly infinite, concept; reason becomes the well-known, totally formal, merely *regulative unity of the systematic employment of the understanding*. It is declared an abuse when Logic, which is supposed to be *a mere canon of judgment*, is considered instead as an *organon* for the production of *objective* insights. The concepts of reason, in which we would have expected a higher power and a deeper content, no longer possess anything *constitutive* as still do the categories; they are *mere* ideas which we are of course are *quite at liberty* to use, provided that by these intelligible entities in which all *truth* was to be revealed we mean nothing

[20] A8/B12.

more than *hypotheses* to which it would be the height of arbitrariness and recklessness to ascribe absolute truth, for they – *cannot be found in any experience*.[21] – Would anyone have ever thought that philosophy would deny truth to intelligible entities on the ground that they lack the spatial and temporal material of the senses?

Directly connected with this is the issue of how to view the concept and the character of logic generally, the issue namely of the *relation* of the *concept* and *its science* to *truth* itself. This is an issue on which the Kantian philosophy holds the same position as is commonly taken. We cited earlier from Kant's deduction of the categories to the effect that, according to it, the *object* in which the manifold of intuition is *unified* is this unity only by *virtue of the unity of self-consciousness*.[22] The *objectivity of thought* is here, therefore, specifically defined: it is an identity of concept and thing which is *the truth*. In the same way it is also commonly accepted that, as thought appropriates a given subject matter, this subject matter thereby undergoes an alteration and is made from something sensuous **12.24** into something thought. But nothing is changed in this alteration in so far as the essentiality of the object goes; on the contrary, it is accepted that the object is in its *truth* only in its concept, whereas in the immediacy in which it is given it is only *appearance* and *accidentality*; that the cognition conceptualizing the subject matter is a cognition of it as it is *in and for itself*, and the concept is its very objectivity. But, on the other hand, it is also equally claimed that *we cannot know things as they are in and for themselves* and that *truth is inaccessible to rational cognition*; that the aforesaid truth that would consist in the unity of the object and the concept is in fact only appearance, again on the ground now that the content is only the manifold of intuition. But we have just remarked, regarding this point, that it is precisely in the concept that the manifold is sublated inasmuch as it pertains to intuition as opposed to the concept, and that through the concept the subject matter is reduced to its non-contingent essentiality; the latter does enter into appearance, and this is why appearance is not something merely essenceless but is the manifestation of essence. When this manifestation of essence is set free, then we have the concept. – These propositions that we are now recalling are not dogmatic assertions, for they are results that obtained on their own out of the whole development of *essence*. The present position to which this development has led is that the form of the *absolute* which is higher than being and essence is the *concept*. Viewed from this side, the concept has *subjugated* the spheres of

[21] A324/B384–385. [22] Cf. above, 12.18 and note 10.

being and essence to which, from other starting points, feeling, intuition, and representation, which appeared to be its antecedent conditions, also belong; it has demonstrated itself to be *their unconditional foundation*. But this is one side alone. There is a *second side* left to which this third book of the Logic is devoted, namely the demonstration of how the concept forms within and from itself the reality that has vanished in it. It is conceded, in other words, that the cognition that does not go past the concept, purely as concept, is still incomplete, that it has only arrived at *abstract truth*. But its incompleteness does not lie in its lack of that alleged reality as would be given in feeling and intuition, but in the fact that the concept has yet to give to itself its *own* reality, one that it generates out of itself. The demonstrated absoluteness of the concept as against the material of experience and, more exactly, the categorial and the reflective determinations of it, consists in this, that as this material appears *outside* and *before* the concept, it has no *truth* but that it has it only in its ideality or in its identity with the concept. The *derivation* of the real from the concept, if "derivation" is what we want to call it, consists at first essentially in this, that the concept in its
12.25 formal abstraction reveals itself to be incomplete and through a dialectic immanently grounded in it passes over into reality: it passes over into it, however, as into something which it generates out of itself, not as if it were falling back again onto a ready-made reality which it finds opposite it, or as if it were taking refuge, because it sought for something better but found none, into something that has already been proven to be the unessential element of appearance. – It will always be a source of wonder how the Kantian philosophy did acknowledge that the relation of thought to sensuous existence (the relation at which it stopped) is only a relation of mere appearance, and also well recognized in the *idea* in general a higher unity of those two terms, even gave expression to it, as for example in the idea of an intuitive understanding, and yet stopped short at that relative relation and at the claim that the concept remains utterly separate from reality – thus asserting as *truth* what it declared to be finite cognition, and explaining away as extravagant and illegitimate figments of thought what it recognized as *truth* and had specifically defined as such.

Since it is logic above all and not science generally whose relation to truth is the issue here, it must be further conceded that logic as the *formal science* cannot also contain, nor should contain, the kind of reality which is the content of the other parts of philosophy, of the sciences of nature and of spirit. These concrete sciences do attain to a more real form of the idea than logic does, but not because they have turned back to the reality which consciousness abandoned as it rose above the appearance of it to

science, or because they have again resorted to the use of such forms as are the categories and the determinations of reflection, the finitude and untruth of which were demonstrated in the logic. The logic rather exhibits the rise of the *idea* up to the level from which it becomes the creator of nature and passes over into the form of a *concrete immediacy* whose concept, however, again shatters this shape also in order to realize itself as *concrete spirit*. These sciences, just as they had the logic as their prototype, hold on to its logical principle or the concept as in them their formative factor. As contrasted with them, the logic is of course the *formal* science, yet the science of the *absolute form* which is implicit totality and contains the *pure idea of truth itself*. This absolute form has in it a content or reality of its own; the concept, since it is not a trivial, empty identity, obtains its differentiated determinations in the moment of negativity or of absolute determining; and the content is only these determinations of the absolute form and nothing else – a content posited by the form itself and therefore adequate to it. – This form is for this reason of quite another nature than logical form is ordinarily taken to be. It is *truth* already *on its own account*, **12.26** because this content is adequate to its form or this reality to its concept, and it is *pure truth*, because the determinations of the content do not yet have the form of an absolute otherness or of absolute immediacy. – When Kant in the *Critique of Pure Reason* (p. 83),[23] in connection with logic comes to discuss the old and famous question: *What is truth?*, he starts by *passing off* as a triviality the nominal definition that it is the agreement of cognition with its subject matter – a definition which is of great, indeed of supreme value. If we recall this definition together with the fundamental thesis of transcendental idealism, namely that *rational cognition* is incapable of comprehending *things in themselves*,[24] that *reality* lies *absolutely* outside *the concept*, it is then at once evident that such a *reason*, one which is incapable of *setting itself in agreement* with its subject matter, and the *things in themselves*, such as are not in agreement with the rational concept – a concept that does not agree with reality and a reality that does not agree with the concept – that these are *untrue conceptions*. If Kant had measured the idea of an *intuitive understanding* against that first definition of truth, he would have treated that idea which expresses the required agreement, not as a figment of thought but rather as truth.

"What we would want to know," Kant proceeds to say, "is a *universal* and *certain criterion of truth of any cognition whatever*, one that would be valid for all cognitions *without distinction of their subject matters*; but since

[23] In fact, A58/B82. [24] Bxxvi.

any such criterion would *abstract from all content* of cognition (the *reference to its object*), and *truth has to do precisely with this content*, it would be quite *impossible*, even *absurd*, to ask for a mark of the *truth of this content* of cognitions."[25] – Here we have, clearly expressed, the ordinary conception of the formal function of logic which gives to the adduced argument the air of convincing. But first of all it is to be noted what usually happens to this kind of formal argumentation: it forgets as it speaks that on which it is based and of which it speaks. It would be absurd, it says, to ask for a criterion of the *truth of the content* of cognition. But according to the definition on which it is based it is not the content that constitutes the truth, but the *agreement* of it with the concept. Such a content as is here spoken of, one *without the concept*, is something void of concept and therefore void of essence; of course, we cannot ask of such a content for a criterion of truth,
12.27 but for the opposite reason, namely, not because it cannot be the *required agreement* on account of its being void of concept, but because it cannot be anything more than just another truthless opinion. – Let us leave aside any talk about content, which is the cause of the confusion here – the confusion in which formalism invariably falls, and which is responsible for making it say, every time it tries to explain itself, the opposite of what it wants to say – and let us just stay with the abstract view that the logic is only formal, that it abstracts from all content. What we then have is a one-sided cognition which is not supposed to contain any subject matter, an empty form void of determination which is therefore just as little an agreement (for it necessarily takes *two* for an agreement) as it is truth. – In the *a priori synthesis* of the concept, Kant did have a higher principle in which it was possible to recognize a duality and therefore what is required for truth; but the material of the senses, the manifoldness of intuition, was too strong for him to be able to wrest himself away from it and turn to a consideration of the concept and the categories *in and for themselves*, and to a speculative form of philosophizing.

Since logic is the science of the absolute form, this formal discipline,[26] *in order to be true*, must have a *content* in it which is adequate to its form; all the more so, because logical form is pure form and logical truth, accordingly, the *pure truth* itself. This formal discipline must therefore be thought of as inherently much richer in determinations and content, and also of infinitely greater efficacy over the concrete, than it is normally taken to be. The laws of logic by themselves (extraneous elements aside, such as applied logic and the rest of the psychological and anthropological

[25] Cf. A57–59/B82–83. [26] *dieses Formelles*.

material) are commonly restricted, apart from the law of contradiction, to a few meager propositions concerning the conversion of judgments and the forms of inference. And the forms, too, that come up in this context, as well as their further specifications, are only taken up historically as it were, not subjected to criticism to see whether they are in and for themselves true. For example, the form of the positive judgment is accepted as something perfectly correct in itself, and whether the judgment is true is made to depend solely on the content. No thought is given to investigating whether this form of judgment is a form of truth *in and for itself*; whether the proposition it enunciates, "the individual is a universal," is not inherently dialectical. It is at once assumed that the judgment is capable of possessing truth on its own account, and that every proposition expressed in a positive judgment is true, even though it is patently evident that the judgment lacks what is required by the definition of truth, namely the agreement of the concept with its subject matter; for if the predicate, which here is the universal, is taken as the concept, and the subject, which is the singular, as the subject matter, then the concept does not agree with it. But if the **12.28** *abstract universal* which is the predicate does not yet amount to a concept (for surely there is more that belongs to it); or if the subject, for its part, still is not much more than a grammatical one, how should the judgment possibly contain truth seeing that its concept and the intended object do not agree, as also that the concept is missing and indeed the object as well? – This rather is then where the *impossible* and the *absurd* lie, in the attempt to grasp the truth in such forms as are the positive judgment or a judgment in general. Just as the Kantian philosophy did not consider the categories in and for themselves, but declared them to be finite determinations unfit to hold the truth, on the only inappropriate ground that they are subjective forms of self-consciousness, still less did it subject to criticism the forms of the concepts that make up the content of ordinary logic. What it did, rather, is to pick a portion of them, namely the functions of judgments, for the determination of categories, and simply accepted them as valid presuppositions. Even if there were nothing more to the forms of logic than these formal functions of judgment, for that reason alone they would already be worthwhile investigating to see how far, by themselves, they correspond to the *truth*. A logic that does not perform this task can at most claim the value of a natural description of the phenomena of thought as they simply occur. It is an infinite merit of Aristotle, one that must fill us with the highest admiration for the power of his genius, that he was the first to undertake this description. But it is necessary to go further and determine both the systematic connection of these forms and their value.

12.29

DIVISION

The concept, as considered so far, has demonstrated itself to be the unity of *being* and essence. Essence is the *first negation* of being, which has thereby become *reflective shine*; the concept is the *second negation*, or the negation of this negation, and is therefore being which has been restored once more, but as in itself the infinite mediation and negation of being. – In the concept, therefore, *being* and *essence* no longer have determination as *being* and *essence*, nor are they only in such a unity in which each would *reflectively shine* in the other. Consequently, the concept does not differentiate itself into these determinations. The concept is the truth of the substantial relation in which being and essence attain their perfect self-subsistence and determination each through the other. The truth of substantiality proved to be the *substantial identity*, an identity that equally is, and only is, *positedness*. Positedness is *determinate existence* and *differentiation*; in the concept, therefore, being-in-and-for-itself has attained a true existence adequate to it, for that positedness is itself being-in-and-for-itself. This positedness constitutes the difference of the concept in the concept itself; and because the concept is immediately being-in-and-for-itself, its *differences* are themselves the *whole concept – universal in their determinateness and identical in their negation*.

This is now the concept itself of the concept, but *at first only* the concept of the concept or also itself *only* concept. Since the concept is being-in-and-for-itself by being a positedness, or is absolute substance, and substance manifests the *necessity* of distinct substances as an *identity*, this identity must itself posit what it is. The moments of the movement of the substantial relation through which the concept *came to be* and the reality thereby exhibited are only in the transition to the concept; that reality is not yet the *concept's own* determination, one that has emerged out of it; it fell in the sphere of necessity whereas the reality of the concept can only be its *free* determination, a determinate existence in which the concept is identical with itself and whose moments are themselves concepts *posited through the concept itself*.

At first, therefore, the concept is only *implicitly* the truth; because it is only something *inner*, it is equally *only something outer*. It is *at first* simply
12.30 an *immediate* and in this shape its moments have the form of *immediate*, *fixed determinations*. It appears as the *determinate concept*, as the sphere of mere *understanding*. – Because this form of immediacy is an existence still inadequate to the nature of the concept, for the concept is *free* and only refers to itself, it is an *external* form in which the concept does not exist

in-and-for-itself, but can only count as *something posited* or *subjective*. – The shape of the *immediate* concept constitutes the standpoint that makes of the concept a subjective thinking, a reflection external to the *subject matter*. This stage constitutes, therefore, *subjectivity*, or the *formal concept*. Its externality is manifested in the *fixed being* of its *determinations* that makes them come up each by itself, isolated and qualitative, and each only externally referred to the other. But the identity of the *concept*, which is precisely their *inner* or *subjective* essence, sets them in dialectical movement, and through this movement their singleness is sublated and with it also the separation of the concept from the subject matter, and what emerges as their truth is the *totality* which is *the objective concept*.

Second, in its *objectivity* the concept is the *fact itself as it exists in-and-for-itself*. The *formal* concept makes itself into the fact by virtue of the necessary determination of its form, and it thereby sheds the relation of subjectivity and externality that it had to that matter. Or, conversely, objectivity is the *real concept* that *has emerged from its inwardness* and has passed over into existence. – In this identity with the fact, the concept thus has an existence which is *its own* and *free*. But this existence is still a freedom which is *immediate* and not yet *negative*. Being at one with the subject matter, the concept is *submerged* into it; its differences are objective determinations of existence in which it is itself again the *inner*. As the soul of objective existence, the concept must *give itself* the form of *subjectivity* that it *immediately* had as *formal* concept; and so, *in the form* of the free concept which in objectivity it still lacked, it steps forth over against that objectivity and, over against it, it makes therein the identity with it, which *as objective concept* it has in and for itself, into an identity that is also *posited*.

In this consummation in which the concept has the form of freedom even in its objectivity, the *adequate*[27] *concept* is the *idea*. *Reason*, which is the sphere of the idea, is the *self-unveiled*[28] *truth* in which the concept attains the realization absolutely adequate to it, and is free inasmuch as in this real world, in its objectivity, it recognizes its subjectivity, and in this subjectivity recognizes that objective world.

[27] Hegel uses the Latinate word "*adäquate*" to bring out the notion of truth, traditionally defined as *adaequatio rei et intellectus*.

[28] Hegel is playing on the Greek word for "truth," which literally means an "unveiling."

SECTION I

12.31

Subjectivity

The concept is, to start with, *formal*, the concept in its *beginning* or as the *immediate* concept. – In this immediate unity, its difference or its positedness is, *first*, itself initially simple and only *a reflective shine*, so that the moments of the difference are immediately the totality of the concept and only the *concept as such*.

But, *second*, because it is absolute negativity, the concept divides and posits itself as the *negative* or the *other* of itself; yet, because it is still *immediate* concept, this positing or this differentiation is characterized by the *reciprocal indifference* of its moments, each of which comes to be on its own; in this *division* the unity of the concept is still only an external *connection*. Thus, as the *connection* of its moments posited as *self-subsisting* and *indifferent*, the concept is *judgment*.[29]

Third, although the judgment contains the unity of the concept that has been lost in its self-subsisting moments, this unity is not *posited*. It will become posited by virtue of the dialectical movement of the judgment which, through this movement, becomes *syllogistic inference*,[30] and this is the fully posited concept, for in the inference the moments of the concept as *self-subsisting* extremes and their *mediating unity* are both equally posited.

But since this *unity* itself, as unifying *middle*, and the *moments*, *as self-subsisting* extremes, stand at first immediately opposite one another, this contradictory relation that occurs in the *formal inference* sublates itself, and the *completeness* of the concept passes over into the unity of *totality*; the *subjectivity* of the concept into its *objectivity*.

[29] Note the play on words: "division" and "judgment" are in German "*Teilung*" and "*Urteil*."
[30] "syllogistic inference" = *Schluß*.

CHAPTER I

The concept

12.32

The faculty of concepts is normally associated with the *understanding*, and the latter is accordingly distinguished from the *faculty of judgment* and from the faculty of syllogistic inferences which is formal *reason*. But it is particularly with *reason* that the understanding is contrasted, and it signifies then, not the faculty of concepts in general, but the faculty of *determinate* concepts, as if, as the prevailing opinion has it, the concept were *only* a *determinate*. When distinguished in this meaning from the formal faculty of judgment and from formal reason, the understanding is accordingly to be taken as the faculty of the *single* determinate concept. For the judgment and the syllogism or reason, as formal, are themselves only *a thing of the understanding*,[31] since they are subsumed under the form of the abstract determinateness of the concept. Here, however, we are definitely not taking the concept as just abstractly determined; the understanding is therefore to be distinguished from reason only in that it is the faculty of the concept as such.

This universal concept that we now have to consider contains the three moments of *universality*, *particularity*, and *singularity*. The difference and the determinations which the concept gives itself in its process of distinguishing constitute the sides formerly called *positedness*. Since this positedness is in the concept identical with being-in-and-for-itself, each of the moments is just as much the *whole* concept as it is *determinate concept* and *a determination* of the concept.

It is at first *pure concept*, or the determination of *universality*. But the pure or universal concept is also only a *determinate* or *particular* concept that takes its place alongside the other concepts. Because the concept is a totality, and therefore in its universality or pure identical self-reference is essentially a determining and a distinguishing, it possesses in itself the norm by which this form of its self-identity, in pervading all the moments

[31] "a thing of the understanding" = *ein Verständiges*.

and comprehending them within, equally determines itself immediately as being *only the universal* as against the distinctness of the moments.

Second, the concept is thereby posited as this *particular* or *determinate* concept, distinct from others.

Third, *singularity* is the concept reflecting itself out of difference into absolute negativity. This is at the same time the moment at which it has
12.33 stepped out of its identity into its *otherness and becomes judgment*.

A. THE UNIVERSAL CONCEPT

The pure concept is the absolutely infinite, unconditioned and free. It is here, as the *content* of our treatise begins to be the concept itself, that we must look back once more at its genesis. *Essence came to be out of being*, and the concept out of essence, therefore also from being. But this becoming has the meaning of a self-*repulsion*, so that *what becomes* is rather the *unconditional* and the *originative*. In passing over into essence, *being* became a *reflective shine* or a *positedness*, and *becoming* or the passing over into an *other* became a *positing*; conversely, the *positing* or the reflection of essence sublated itself and restored itself to a *non-posited*, an *original* being. The concept is the mutual penetration of these moments, namely, the qualitative and the originative existent is only as positing and as immanent turning back, and this pure immanent reflection simply is the *becoming-other* or *determinateness* which is, consequently, no less infinite, self-referring *determinateness*.

Thus the concept is *absolute self-identity* by being first just this, the negation of negation or the infinite unity of negativity with itself. This *pure* self-*reference* of the concept, which is such by positing itself through the negativity, is the *universality* of the concept.

Universality seems incapable of explanation, because it is the *simplest* of determinations; explanation must rely on determinations and differentiations and must apply predicates to its subject matter, and this would alter rather than explain the simple. But it is precisely of the nature of the universal to be a simple that, by virtue of absolute negativity, contains difference and determinateness *in itself* in the highest degree. *Being* is simple as an *immediate*; for this reason we can only *intend* it without being able to say what it is; therefore, it is immediately one with its other, *non-being*. The concept of being is just this, that it is so simple as to vanish into its opposite immediately; it is *becoming*. The *universal* is, on the contrary, a *simple* that is at the same time *all the richer in itself*, for it is the concept.

First, therefore, it is simple self-reference; it is only *in itself*. But, *second*, this identity is in itself absolute *mediation* but not anything *mediated*. Of the universal which is mediated, that is to say, the *abstract* universal, the one opposed to the particular and the singular, of that we shall have to speak **12.34** only in connection with the determinate concept. – Yet, even the *abstract universal* entails this much, that in order to obtain it there is required the *leaving aside* of other determinations of the concrete. As determinations in general, these determination are *negations*, and *leaving them aside* is a further *negating*. Even in the abstract universal, therefore, the negation of negation is already present. But this double negation comes to be represented as if it were *external* to it, both as if the properties of the concrete that are left out were different from the ones that are retained as the content of the abstraction, and as if this operation of leaving some aside while retaining the rest went on outside them. With respect to this movement, the universal has not yet acquired the determination of *externality*; it is still in itself that absolute negation which is, precisely, the negation of negation or absolute negativity.

Accordingly, because of this original unity, the first negative, or the *determination*, is not, to begin with, a restriction for the universal; rather, the latter *maintains itself in it* and its self-identity is positive. The categories of being were, as concepts, essentially these identities of the determinations with themselves in their restriction or their otherness; but this identity was only *implicitly* the concept, was not yet made manifest. Consequently, the qualitative determination perished as such in its other and had as its truth a determination *diverse* from it. The universal, on the contrary, even when it posits itself in a determination, *remains* in it what it is. It is the *soul* of the concrete which it inhabits, unhindered and equal to itself in its manifoldness and diversity. It is not swept away in the *becoming* but *persists* undisturbed through it, endowed with the power of unalterable, undying self-preservation.

It also does not simply *shine reflectively* in its other, as does the determination of reflection. This determination, as *something relative*, does not refer only to itself but is a *relating*. It *lets itself be known* in its other, but at first it only *shines reflectively* in it, and this reflective shining of each in the other, or their reciprocal determination, has the form of an external activity alongside their self-subsistence. – The *universal* is posited, on the contrary, as the *essence* of its determination, as this determination's *own positive nature*. For the determination that constitutes the negative of the universal is in the concept simply and solely a *positedness*; essentially, in other words, it is at the same time the negative of the negative, and only

is as this self-identity of the negative which is the universal. To this extent, the universal is also the *substance* of its determinations, but in such a way
12.35 that what for the substance as such was an *accident*, is the concept's own self *mediation*, its own *immanent* reflection. But this mediation, which first raises the accidental to *necessity*, is the *manifested* reference; the concept is not the abyss of formless substance, or the necessity which is the *inner* identity of things or circumstances different from each other and reciprocally constricting; rather, as absolute negativity, it is the informing and creative principle, and since the determination is not as limitation but is just as much simply sublated as determination, is positedness, so is the reflective shine the appearance as appearance of *the identical*.

The universal is therefore *free* power; it is itself while reaching out to its other and embracing it, but without *doing violence* to it; on the contrary, it is at rest in its other as *in its own*. Just as it has been called free power, it could also be called *free love* and *boundless blessedness*, for it relates to *that which is distinct from it* as *to itself*; in it, it has returned to itself.

Mention has just been made of *determinateness*, even though the concept has not yet progressed to it, being at first only as the universal and only self-identical. But one cannot speak of the universal apart from determinateness which, to be more precise, is particularity and singularity. For in its absolute negativity the universal contains determinateness in and for itself, so that, when speaking of determinateness in connection with the universal, the determinateness is not being imported into the latter from outside. As negativity in general, that is, according to the *first immediate* negation, the universal has determinateness *in it* above all *as particularity*; as *a second universal*, as the negation of negation, it is *absolute determinateness*, that is, *singularity* and *concreteness*. – The universal is thus the totality of the concept; it is what is concrete, is not empty but, on the contrary, has *content* by virtue of its concept – a content in which the universal does not just preserve itself but is rather the universal's own, immanent to it. It is of course possible to abstract from this content, but what we have then is not the universal element of the concept but the *abstract universal*, which is an isolated and imperfect moment of the concept, void of truth.

More precisely, the universal shows itself to be this totality as follows. In so far as the universal possesses determinateness, this determinateness is not only the *first* negation but also the reflection of this negation into itself. According to that first negation, taken by itself, the universal is a *particular*, and in this guise we shall consider it in a moment. In the other determinateness, however, the universal is still essentially universal, and this side we have here still to consider. – For this determinateness, as it

is in the concept, is the total reflection – a *doubly reflective shine*, both *outwards*, as reflection into the other, and *inwards*, as reflection into itself. The outward shining establishes a distinction with respect to an *other*; the universal accordingly takes on a particularity which is resolved in a higher **12.36** universality. Inasmuch as it now is also only a relative universal, it does not lose its character of universality; it preserves itself in its determinateness, not just because it remains indifferent to it – for then it would be only *posited together* with it – but because of what has just been called the *inward shining*. The determinateness, as determinate *concept*, *is bent back into itself*; it is the concept's own immanent *character*, a character made essential by being taken up into the universality and by being pervaded by it, just as it pervades it in turn, equal in extension and identical with it. This is the character that belongs to the *genus* as the determinateness which is not separated from the universal. To this extent, it is not an outwardly directed *limitation*, but is *positive*, for by virtue of the universality it stands in free self-reference. Thus even the determinate concept remains in itself infinitely free concept.

But in regard to the other side in which the genus is limited because of its determinate character, we have just said that, as a lower genus, it has its resolution in a higher universal. This universal can also be grasped as a genus but as a more abstract one; it always pertains, however, only to the side of the determinate concept which is outwardly directed. The truly higher universal is the one in which this outwardly directed side is redirected inwardly; this is the second negation in which the determinateness is present simply and solely *as* something posited, or *as* reflective shine. Life, the "I," spirit, absolute concept, are not universals only as higher genera, but are rather *concretes* whose determinacies are also not mere species or lower genera but determinacies which, in their reality, are self-contained and self-complete. Of course, life, the "I," finite spirit, are also only determinate concepts. To this extent, however, their resolution is in a universal which, as the truly absolute concept, is to be grasped as the idea of infinite spirit – the spirit whose *posited being* is the infinite, transparent reality in which it contemplates its *creation* and, in this creation, itself.

The true, infinite universal, the one which, immediately in itself, is just as much particularity as singularity, is now to be more closely examined as *particularity*. It *determines* itself freely; the process by which it becomes finite is not a transition, the kind that occurs only in the sphere of being; *it is creative power* as self-referring absolute negativity. As such, it differentiates itself internally, and this is a *determining*, because the differentiating is one with the universality. Accordingly, it is a positing of differences

that are themselves universals, self-referring. They become thereby *fixed*, isolated differences. The isolated *subsistence* of the finite that was earlier
12.37 determined[32] as its being-for-itself, also as thinghood, as substance, is in its truth universality, the form with which the infinite concept clothes its differences – a form which is equally itself one of its differences. Herein consists the *creativity* of the concept, a creativity which is to be comprehended only in the concept's innermost core.

B. THE PARTICULAR CONCEPT

Determinateness as such belongs to being and the qualitative; as the determinateness of the concept, it is *particularity*. It is not a *limit*, as if it were related to an *other* beyond it, but is rather, as just shown, the universal's own immanent moment; in particularity, therefore, the universal is not in an other but simply and solely with itself.

The particular contains the universality that constitutes its substance; the genus is *unaltered* in its species; these do not differ from the universal but only *from each other*. The particular has one and the same universality as the *other* particulars to which it is related. The diversity of these particulars, because of their identity with the universal, is *as such* at the same time universal; it is *totality*. – The particular, therefore, does not only *contain* the universal but exhibits it also *through its determinateness*; accordingly the universal constitutes a *sphere* that the particular must exhaust. This totality, inasmuch as the determinateness of the particular is taken as mere *diversity*, appears as *completeness*. In this respect, the species are complete simply in so far as *there are* no more of them. There is no inner standard or principle available for them, for their *diversity* is just the dispersed[33] difference for which the universality, which is for itself absolute unity, is a merely external reflex and an unconstrained, contingent completeness. But diversity passes over into *opposition*, into an *immanent connection* of diverse moments. Particularity, however, because it is universality, is this immanent connection, not by virtue of a transition, but in and for itself. It is totality intrinsically, and *simple* determinateness, essential *principle*. It has no *other* determinateness than that posited by the universal itself and resulting from it in the following manner.

12.38 The particular is the universal itself, but it is its difference or reference to an *other*, its *outwardly reflecting shine*; but there is no other at hand from

[32] Cf. above, 11.327ff., the various shapes of "appearance." [33] *Einheitslose*.

which the particular would be differentiated than the universal itself. – The universal determines *itself*, and so is itself the particular; the determinateness is *its* difference; it is only differentiated from itself. Its species are therefore only (a) the universal itself and (b) the particular. The universal is as concept itself and its opposite, and this opposite is in turn the universal itself as its posited determinateness; the universal overreaches it and, in it, it is with itself. Thus it is the totality and the principle of its diversity, which is determined wholly and solely through itself.

There is, therefore, no other true logical division than this, that the concept sets itself on one side as the *immediate*, indeterminate universality; it is this very indeterminateness that makes its determinateness, or that it is a *particular*. The two are both a particular and are therefore *coordinated*. Both, as particular, are also *determinate as against* the universal, and in this sense they are *subordinated* to it. But even this universal, *as against* which the particular is determined, is for that reason itself also *just one* of the opposing sides. When we speak of *two opposing sides*, we must repeat that the two constitute the particular, not just *together*, as if they were *alike* in being particular only for external reflection, but because their determinateness *over against each other* is at the same time essentially only one determinateness; it is the negativity which in the universal is *simple*.

Difference, as it presents itself here, is in its concept and therefore in its truth. All previous difference has this unity in the concept. As it is present immediately in being, difference is the *limit* of an *other*; as present in reflection, it is relative, posited as referring essentially to its other; here is where the unity of the concept thus begins to be *posited*; at first, however, the unity is only a *reflective shine* in an other. – The true significance of the transitoriness and the dissolution of these determinations is just this, that they attain to their concept, to their truth; being, existence, something, or whole and part, and so on, substance and accidents, cause and effect, are thought determinations on their own; as determinate *concepts*, however, they are grasped in so far as each is cognized in unity with its others or in opposition to them. – Whole and parts, for example, or cause and effect, and so on, are not yet diverse terms that are determined as *particular* relatively to each other, for although they *implicitly* constitute one concept, their *unity* has not yet attained the form of *universality*; thus the *difference* as well which is in these relations, does not yet have the form of being *one* determinateness. Cause and effect, for example, are not two diverse concepts but only *one determinate* concept, and causality is, like every concept, a *simple concept*. **12.39**

With respect to completeness, we have just seen that the determinate moment[34] of particularity is *complete* in the difference of the *universal* and the *particular*, and that only these two make up the particular species. To be sure, there are more than two species to be found in any genus in *nature*, and these many species cannot stand in the same relation to each other as we have shown. This is the impotence of nature, that it cannot abide by and exhibit the rigor of the concept and loses itself in a blind manifoldness void of concept. We can *wonder* at nature, at the manifoldness of its genera and species, in the infinite diversity of its shapes, for wonder is *without concept* and its object is the irrational. It is allowed to nature, since nature is the self-externality of the concept, to indulge in this diversity, just as spirit, even though it possesses the concept in the shape of concept, lets itself go into pictorial representation and runs wild in the infinite manifoldness of the latter. The manifold genera and species of nature must not be esteemed to be anything more than arbitrary notions of spirit engaged in pictorial representations. Both indeed show traces and intimations of the concept, but they do not exhibit it in trustworthy copy, for they are the sides of its free self-externality; the concept is the absolute power precisely because it can let its difference go free in the shape of self-subsistent diversity, external necessity, accidentality, arbitrariness, opinion – all of which, however, must not be taken as anything more than the abstract side of *nothingness*.

As we have just seen, the *determinateness* of the particular is *simple* as *principle*, but it is also simple as a moment of the totality, determinateness as against the *other* determinateness. The concept, in determining or differentiating itself, behaves negatively towards its unity and gives itself the form of one of its ideal moments *of being*; as a determinate concept, it has a *determinate existence* in general. But this being no longer has the significance of mere *immediacy*, but has the significance rather of an immediacy which is equal to itself by virtue of absolute mediation, an immediacy that equally contains in itself the other moment of essence or of reflection. This universality, with which the determinate clothes itself, is *abstract universality*. The particular has this universality in it as its essence; but in so far as the determinateness of the difference is *posited* and thereby has being, the universality is form in it, and the determinateness as such is its *content*. Universality becomes form inasmuch as the difference is something essential, just as in the pure universal it is, on the contrary, only absolute negativity and *not* a difference *posited* as such.

[34] *das Bestimmte*.

Now the determinateness is indeed an *abstraction*, as against the *other* determinateness; but the other determinateness is only universality itself, and this too is therefore *abstract universality*; and the determinateness **12.40**
of the concept, or particularity, is again nothing more than determinate universality. In this universality, the concept is *outside itself*, and because *it is it*, *the concept*, which is there outside itself, the abstract-universal contains all the moments of the concept. It is (α) universality, (β) determinateness, (γ) the *simple* unity of the two; but this unity is *immediate*, and the particularity is not therefore *as* totality. *Implicitly* it is this *totality* also, and *mediation*; it is essentially a reference to the *other excluding it*, or the *sublation of negation*, namely of the *other* determinateness – an *other* that lingers on only as an intention, for it vanishes immediately revealing itself to be the same as its *other* is supposed to be. Therefore, what makes this universality an abstraction is that the mediation is only a *condition*, or is not *posited in it*. Because it is not *posited*, the unity of the abstraction has the form of immediacy, and the content has the form of indifference to its universality, for the content is nothing but this totality which is the universality of absolute negativity. Hence the abstract universal is indeed the *concept*, but the *unconceptualized* concept, the concept not posited as such.

When we speak of the *determinate concept*, what we ordinarily mean is precisely just this *abstract universal*. Even by *concept* as such, what is generally understood is only this *unconceptualized* concept, and the *understanding* is designated as its faculty. *Demonstration* belongs to this *understanding* inasmuch as it *proceeds* by way of *concepts*, that is to say, only in *determinations*. This progression by way of concepts does not therefore reach past finitude and necessity; the highest it reaches is the negative infinite, the abstraction of the highest essence which is itself the determinateness of the *indeterminateness*. Absolute substance, too, although not this empty abstraction but on the contrary a totality according to content, is still abstract, for since it is without absolute form, its innermost truth is not constituted by the concept; although it is the identity of universality and particularity, or of thought and externality, this identity is not the *determinateness* of the concept; there is rather an understanding *outside* it – an understanding which is contingent precisely because it is outside it – in which and for which substance exists in diverse attributes and modes.

Moreover, abstraction is not as *empty* as it is usually said to be; it is the *determinate* concept; it has some determinateness or other for its content; the highest essence also, the pure abstraction, has the determinateness of indeterminateness, as just mentioned; but indeterminateness is a determinateness because it is supposed to stand *opposite* the determinate. But the **12.41**

moment one says what it is, its intended meaning sublates itself by itself; for it is spoken of on a par with determinateness, and from this abstraction the concept and its truth are brought out. – To be sure, any determinate concept is *empty* in so far as it does not contain the totality, but only a one-sided determinateness. Even when it has otherwise concrete content such as, for instance, humankind, the state, animal, etc., it remains an empty concept inasmuch as its determinateness is not the *principle* of its differentiation; the principle contains the beginning and the essence of its development and realization; any other determinateness of the concept is however otiose. To reproach the concept as such for being empty is to ignore its absolute determinateness which is the difference of the concept and the only true content in the element of the concept.

Here we have the circumstance that explains why the understanding is nowadays held in such a low repute and is so much discredited when measured against reason;[35] it is the *fixity* which it imparts to determinacies and consequently to anything finite. This fixity consists in the form of the abstract universality just considered that makes them *unalterable*. For qualitative determinateness, and also the determination of reflection, are essentially *limited*, and because of their limitation they entail a reference to their *other*; hence the *necessity* of their transition and passing away. But the universality which they possess in the understanding gives them the form of immanent reflection and, because this form removes from them the reference to the other, they have become *unalterable*. Now although this eternity belongs to the pure concept by nature, the determinations of the concept are eternal essentialities only according to *form*; but their content is not proportionate to this form and, therefore, they are not truth, or imperishable. Their content is not proportionate to the form because it is not the determinateness itself as universal, that is, not as totality of the difference of the concept, or is not itself the whole form; the form of the limited understanding is for this reason itself imperfect universality, that is to say, *abstract* universality. – But further, we must pay due respect to the infinite force of the understanding in splitting the concrete into abstract

[35] This is the position that Jacobi forcefully defended in 1815, in the Preface to the second edition of his dialogue *David Hume* which was intended to serve also as the Introduction to his collected works. Here is one representative passage: "We assert that the faculty of feelings is the one that is exalted above all others in man. It is this faculty alone that distinguishes him from all animals in species, and *incomparably* elevates him above them, i.e. in kind, and not just in degree. We assert that this faculty is one and the same as reason . . . As the senses direct the understanding to sensation, so reason directs it to feeling. The representations of what we are directed to only in feeling we call *ideas*." *Friedrich Heinrich Jacobi's Werke*, Vol. 2 (Leipzig, 1815), p. 61. English trans., *The Main Philosophical Works*, p. 564.

determinacies and plumbing the depth of the difference – this force which alone is at the same time the mighty power causing the transition of the determinacies. The concrete of *intuition* is a *totality*, but a *sensuous totality*, a real material that subsists in space and time, *part outside part*, each indifferent to the other; surely this lack of unity in a manifold that makes it the content of intuition ought not to be credited as privileging it over the universal of the understanding. The mutability that the manifold exhibits in intuition already points to the universal; but all of the manifold that comes to intuition is just more of the same, an equally *alterable other* – not the universal that one would expect to appear and take its place. But **12.42** least of all should we reckon to the credit of such sciences as for example Geometry and Arithmetic that their material carries an *intuitive element* with it, or imagine that their propositions are grounded by it. On the contrary, the presence of that element renders the material of these sciences of an inferior nature; the intuition of figures or numbers is of no help to the science of figures and numbers; only the *thought* of them produces this science. – But if by intuition we understand not merely a sensuous material but the *objective totality*, then the intuition is an *intellectual one*, that is, its subject matter is not existence in its externalization but that element in existence which is unalterable reality and truth – the reality only in so far as it is essentially in the concept and is *determined* by it; the *idea*, of whose more precise nature more will be said later. What intuition as such is supposed to have over the concept is external reality, the reality that lacks the concept and receives value only through the concept.

Consequently, since the understanding exhibits the infinite force that determines the universal, or conversely, since it is the understanding that through the form of universality imparts stable subsistence to the otherwise inherent instability of determinateness, then it is not the fault of the understanding if there is no further advance. It is a subjective *impotence of reason* that allows these determinacies to remain so dispersed, and is unable to bring them back to their unity through the dialectical force opposed to that abstract universality, that is to say, through the determinacies' own nature which is their concept. To be sure, the understanding does give them through the form of abstract universality a *rigidity* of being, so to speak, which they do not otherwise possess in the qualitative sphere and in the sphere of reflection; but by thus simplifying them, the understanding at the same time *quickens* them *with spirit*, and it so sharpens them that only at that point, only there, do they also obtain the capacity to dissolve themselves and to pass over into their opposite. The ripest maturity, the highest stage, that anything can attain is the one at which its fall begins.

The fixity of the determinacies which the understanding appears to run up against, the form of the imperishable, is that of self-referring universality. But this universality belongs to the concept as its own, and for this reason what is found expressed in it, infinitely close at hand, is the *dissolution* of the finite. This universality directly *contradicts* the determinateness of the finite and *makes explicit* its disproportion with respect to it. – Or rather, that disproportion is already at hand; the abstract determinate is posited as one with universality and, for this reason, not for itself (for it would then be only a determinate) but, on the contrary, only as the unity of itself and the universal, that is, as concept.

Therefore the common practice of separating understanding and reason is to be rejected on all counts. On the contrary, to consider the concept
12.43 as void of reason should itself be considered as an incapacity of reason to recognize itself in the concept. The determinate and abstract concept is the *condition*, or rather an *essential moment*, *of reason*; it is form quickened by spirit in which the finite, through the universality in which it refers to itself, is internally kindled, is posited as dialectical and thereby is the *beginning* of the appearance of reason.

Since in the foregoing the determinate concept has been presented in its truth, it is only left to indicate *what*, as so presented, it has already been posited *as*. – Difference, which is an essential moment of the concept but in the pure universal is not yet posited as such, receives its due in the determinate concept. Determinateness in the form of universality is united with the latter to form a simple; determinate universality is self-referring determinateness, determinate determinateness or absolute negativity posited for itself. But self-referring determinateness is *singularity*. Just as universality immediately is particularity in and for itself, no less immediately is particularity also *singularity* in and for itself; this singularity is at first to be regarded as the third moment of the concept, inasmuch as it is held fast in *opposition* to the other two, but also as the absolute turning back of the concept into itself, and at the same time as the posited loss of itself.

Remark

Universality, *particularity*, and *singularity* are, according to the foregoing, the *three* determinate concepts, that is, if one wants to *count* them. We have already shown that number is a form unsuited to conceptual determinations,[36] but for the determination of the concept itself it is unsuited the most; number, since the unit is its principle, turns the counted

[36] Cf. GW 11, 129–130; above 21.203ff.

into totally separated units indifferent to each other. We have seen from the foregoing that the diverse determinate concepts, rather than falling apart as they do when counted, are only *one* and the same concept.

In the customary treatment of logic, a variety of *classifications* and *species* of concepts are adduced. It immediately strikes one as inconsequential that the species are introduced in this way: "*There are*, as regards quality, quantity, etc., the following concepts." The "there are" conveys no other justification than that *we find* the named species and that they show up in *experience*. What we have in this manner is an *empirical* logic – an odd science indeed, an *irrational* cognition of the *rational*. In this the logic sets a very bad precedent for compliance to its own teaching; it allows itself to do the opposite of what it prescribes as a rule, namely, that concepts should be **12.44** derived, and scientific propositions (therefore also the proposition: "There are such and such species of concepts") demonstrated. – In this context, the Kantian philosophy incurs a further inconsequence by *borrowing* the categories for the *transcendental logic*, as so-called root concepts, from the subjective logic where they were assumed empirically.[37] Since the Kantian philosophy admits the latter fact, it is hard to see why transcendental logic resorts to borrowing from such a science rather than directly helping itself from experience.

By way of example, concepts are normally classified according to their *clarity*, namely, as *clear* and *obscure*, *distinct* and *indistinct*, *adequate* and *inadequate*. We can also add to the list *perfect* and *redundant* and other suchlike superfluities. – Now as regards this classification according to *clarity*, it immediately transpires that this standpoint and its connected distinctions are taken from *psychological* and not *logical* determinations. The so-called *clear* concept is supposed to be one that suffices to differentiate one intended object from another. But this cannot be called a concept yet; it is nothing more than a *subjective representation*. What an *obscure* concept might be must be left to itself, for otherwise it would not be obscure but a distinct concept. – The *distinct* concept is supposed to be one whose *mark* can be given. But then it is, strictly speaking, the *determinate concept*. The mark, when taken in its strict signification, is nothing else than the *determinateness* or the simple *content* of the concept in so far as the latter is distinguished from the form of universality. But the *mark* does not quite have at first this more precise meaning; it is generally taken as only a determination by which a *third party* takes note of a subject matter or of the concept; it can therefore be a very contingent circumstance. It expresses in

[37] Cf. A80–81/B106–107.

general not so much the immanence and essentiality of a determination as its reference to an *external* understanding. If the latter really is an understanding, then it has the concept before it and makes a note of it by nothing else than by *what is in the concept itself*. In case the mark is different from the concept, then the mark is a *sign* or some other determination that belongs to the *representation* of the matter at hand, not to its concept. – What an *indistinct* concept might be, this can be passed over as superfluous.

But the *adequate* concept is something higher; it properly denotes the agreement of the concept with reality, and this is not the concept as such
12.45 but the *idea*.

If the *mark* of a distinct concept were really to be the determination itself of the concept, then logic would have trouble with the *simple* concept which, according to another classification, is opposed to the *composite*. For if for a simple concept a true, that is, immanent mark is given, then the concept is no longer regarded as simple; and if no mark is given for it, then the concept is not distinct. But the *clear* concept now comes to the rescue. Unity, reality, and suchlike determinations, are supposed to be *simple* concepts, perhaps because logicians were unable to come up with a determination for them and had to be content, therefore, with just a *clear* concept of them, that is to say, with no concept at all. A *definition*, that is, the statement of a concept, requires as a general rule the statement of genus and specific difference. It thus presents the concept, not as something simple, but in *two* enumerable *components*. Yet surely nobody will suppose that the concept is for that reason a *composite*. – There is an allusion in the mention of the simple concept to *abstract simplicity*, to a unity that does not entail difference and determinateness – a unity, therefore, that does not pertain to the concept. Inasmuch as an object is present in representation, especially in memory, or is also an abstract thought determination, it can be quite simple. Even the object that is richest in content, as for example spirit, nature, world, even God, when non-conceptually apprehended in a simple representation of the equally simple expression: spirit, nature, world, God, is of course something simple at which consciousness can stop short without proceeding to extract the proper determination or a defining mark. But the objects of consciousness ought not to remain so simple, ought not to remain representations or abstract thought determinations, but should rather become *conceptualized*, that is, their simplicity should be determined together with their inner difference. – A *composite* concept, however, is but the equivalent of a wooden iron. We can of course have the concept of a composition; but a composite concept would be something worse than *materialism*, which assumes only the *substance* of the *soul* to be

a composite, yet takes *thought* to be *simple*. The uneducated reflection first stumbles upon the notion of composition because it is the most completely *external* connection, the worst form in which things can be considered; even the lowest of natures must be an *inner* unity. That, to top it off, this form of untruest existence would be extended to the "I," to the concept, is more than one should have expected and it must be regarded as an inept form of barbarism.

Concepts are further divided into *contrary* and *contradictory*, a principal division. – If the task of a treatise on the concept were to give all the **12.46** *determinate* concepts that there are, then we would have to cite all possible determinations – for *all* determinations are concepts, hence determinate concepts – and we would have to list as species of concepts all the categories of *being* as well as all the determinations of *essence*. And this is what is done in the textbooks on logic, where we are told – in *greater* or *lesser* detail, according to the whim of the author – that there are *affirmative*, *negative*, *identical*, *conditional*, *necessary* concepts. But these determinations have already been left behind by *the nature of the concept itself* and are therefore misplaced when applied to the concept itself, thus admitting only the kind of superficial nominal definitions that are of no interest here. – The underlying basis of the distinction between *contrary* and *contradictory* concepts with which we are specifically dealing here is the reflective determination of *diversity* and *opposition*. They are viewed as two particular *species*, each fixed for itself and indifferent towards the other, without any thought being given to the dialectic and the inner nothingness of these differences, as if that which is *contrary* would not equally have to be determined as *contradictory*. The nature and the transition essential to the forms of reflection which they express have been considered in their proper place.[38] In the concept, identity has developed into universality, difference into particularity, opposition (which returns to the ground) into singularity. In these forms, those determinations of reflection are present as they are in their concept. The universal has proved itself to be not only the identical, but at the same time the diverse or *contrary* as against the particular and the singular, and then also to be opposed to them, or *contradictory*; but in this opposition it is identical with them, and it is their true ground in which they are sublated. The same applies to particularity and singularity, which are likewise the totality of the determinations of reflection.

Concepts are further divided into *subordinate* and *coordinate* – a distinction that comes closer to a determination of the concept, namely that of

[38] Cf. above, 11.267–278.

the relation of universality and particularity, in the context of which we did mention them albeit incidentally.[39] But it is customary to consider them like the rest as rigidly fixed relations, and then to produce several otiose propositions regarding them. The most long-winded disquisition in this regard has to do again with the connection of contrariety and contradiction with subordination and coordination. Since *judgment* is *the connection of determinate concepts*, the true relation will have to come first into view only with reference to it. That fashion of *comparing* these determinations without a thought to their dialectic and to the continuing alteration of their determination, or rather to the conjunction in them of opposite determinations, makes the whole disquisition of what may or may not be *consonant* in them – as if this consonance or dissonance were something separate by itself and permanent – into an otiose exercise void of content. – The great Euler, infinitely fertile and sharp of mind in detecting and arranging the deep relations of algebraic quantities,[40] the dry, prosaic Lambert in particular,[41] and others, have attempted to construct a *notation* for this class of relations between determinations of the concept based on lines, figures, and the like, the general intention being to elevate – or in fact rather to debase – the logical modes of relation to the status of a *calculus*. One need only compare the nature of a sign with what the sign ought to indicate immediately to see that even the project of a logical notation is unworkable. The determinations of the concept, universality, particularity, and singularity, certainly are, like lines or the letters of algebra, *diverse*; and they are also *opposed* and allow, therefore, the signs of *plus* and *minus*. But they themselves and especially their connections, even if we stop short at just *subsumption* and *inherence*, are in their essential nature entirely different from algebraic letters, from lines and their connections, from the equality and diversity of magnitudes, the **plus** and **minus**, or the superimposition of lines, or the joining of them in angles and the resulting disposition of space that they enclose. It is characteristic of objects of this kind, as contrasted with the determinations of the concept, that they are mutually *external*, that they have a *fixed* determination. Now when concepts are made to conform to such signs, they cease to be concepts. Their determinations are not inert things, like numbers and lines whose connections lie outside them; they

12.47

[39] Cf above, 12.38.

[40] See Leonhard Euler, *Lettres à une princesse allemande sur divers sujets de physique et de philosophie* (Leipzig: Dyck, 1792–4), Letters 52–55.

[41] See Johann Heinrich Lambert, *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrtum und Schein*, Vol. 1 (Berlin: Akademie, 1990), §229f.

are living movements; the distinguished determinateness of the one side is immediately also internal to the other side; what would be a complete contradiction for numbers and lines is essential to the nature of the concept. – The higher mathematics, which also proceeds to the infinite and allows itself contradictions, can no longer employ its customary signs for representing such determinations. In order to indicate the still conceptually uncomprehended representation of the *infinite approximation* of two ordinates, or when it equates a curve to an infinite number of infinitely small straight lines, all it does is to design two straight lines *outside each other* or to draw straight lines inside but still *distinct* from a curve; for the infinite, which is the point at issue here, higher mathematics falls back on *pictorial representation*.

What first led to this wayward attempt is above all the *quantitative* relation in which *universality*, *particularity*, and *singularity* are supposed to stand to one another: universal means, *more extensive* than particular **12.48**
and singular; and particular, *more extensive* than singular. The concept is *concrete* and the *richest in determination*, because it is the ground and the *totality* of the previous determinations, of the categories of being and the determinations of reflection; these, therefore, are certain also to come up in it. But its nature is totally misunderstood if such determinations are retained in it in their former abstraction – if the *wider extent* of the universal is understood to mean that the universal is a *more*, or a greater quantum, than the particular and the singular. As absolute ground, it is the *possibility* of *quantity*, but no less so of *quality*, that is, its determinations are no less qualitatively distinct; therefore they are already viewed in contravention to their truth when they are posited in the form of quantity alone. So, too, a reflective determination is a *relative*, something in which the opposite shines reflectively; unlike a quantum, its relation is not external. But the concept is more than all this; its determinations are determinate *concepts*, themselves essentially the *totality* of all determinations. It is, therefore, entirely inappropriate, in order to grasp such an inner totality, to want to apply numerical and spatial relations in which the terms fall apart; such relations are rather the last and the worst medium that could be used. Natural relations, as for instance "magnetism" or "color tonality" would make infinitely higher and truer symbols for the purpose. Since the human being has in language a means of designation that is appropriate to reason, it is otiose to look for a less perfect means of representation to bother oneself with. It is essentially only spirit that can grasp the concept as concept, for the latter is not just the property of spirit but its pure self. It is futile to want to fix it by means of spatial figures and algebraic signs for the sake

of the *outer eye* and a *non-conceptual*, *mechanical manipulation*, such as a *calculus*. Also anything else that might be supposed to serve as symbol, like the symbols for the nature of God, can at best elicit only intimations and echoes of the concept; if, however, one insists on employing such symbols for expressing and cognizing the concept, then it is not their *external nature* which is fit for the task; the reverse relation applies, namely that what in the symbols is the echo of a higher determination is recognized to be such only by virtue of the concept, and it is only by *shedding* the sensuous standbys
12.49 that were supposed to express it that one comes closer to the concept.

c. the singular

Singularity, as we have seen,[42] is already posited through particularity; this is *determinate universality* and hence self-referring determinateness, the *determinate determinate*.

1. At first, therefore, singularity appears as *the reflection* of the concept out of its determinateness *into itself*. It is the concept's self-*mediation* by virtue of which, since its *otherness* has once more been made into an *other*, it restores itself as self-equal, but in the determination of *absolute negativity*. – The negative in the universal, by virtue of which this universal is a *particular*, was earlier determined as *a doubly reflective shine*.[43] In so far as the reflective shining is *inward*, the particular remains a universal; through the outward shining, it is a *determinate particular*; the turning back of this side into the universal is twofold, *either* by virtue of an *abstraction* that lets the particular fall away and climbs to a *higher* and the *highest genus*, or by virtue of the *singularity* to which the universality in the determinateness itself descends. – Here is where the false start is made that makes abstraction stray away from the way of the concept, abandoning the truth. Its higher and highest universal to which it rises is only a surface that becomes progressively more void of content; the singularity which it scorns is the depth in which the concept grasps itself and where it is posited as concept.

Universality and *particularity* appeared, on the one hand, as moments of the *becoming* of singularity. But it has already been shown that the two are in themselves the total concept; consequently, that in *singularity* they do not pass over into an *other* but that, on the contrary, what is posited in it is what they are in and for themselves.[44] The *universal* is *for itself* because it is absolute mediation in itself, self-reference only as absolute negativity. It is an *abstract* universal inasmuch as this sublating is an *external* act and so

[42] Cf. above, 12.43. [43] Cf. above, 12.35. [44] Cf. above, 12.35, 37.

a *dropping off* of the determinateness. This negativity, therefore, attaches indeed to the abstract universal, but it remains *outside* it, as a mere *condition* of it; it is the abstraction itself that holds its universal *opposite* it, and so the universal does not have singularity in itself and remains void of concept. – Life, spirit, God, as well as the pure concept, are for this reason beyond the grasp of abstraction, for abstraction keeps singularity away from its products, and singularity is the principle of individuality and personality. And so it comes to nothing but lifeless universalities, void of spirit, color, and content.

But the unity of the concept is so indissoluble that these products of abstraction also, though they are supposed to drop singularity, are rather **12.50** themselves *singulars*. For in elevating the concrete to universality, abstraction grasps the universal as only a determinate universality, and this is precisely the singularity that presented itself as self-referring determinateness. Thus abstraction is a *partitioning* of the concrete and an *isolating* of its determinations; only *singular* properties or moments are picked out by it, for its product must contain what it itself is. But the difference between this singularity of its products and the singularity of the concept is that in the former the singular and the universal differ from each other as *content* and *form* respectively, precisely because the content is not the absolute form, is not the concept itself, or this form is not the totality of form. – However, this closer consideration shows that the product of abstraction is itself the unity of the singular content and of abstract universality, therefore that it is something *concrete*, the opposite of what it is supposed to be.

The *particular*, for the same reason that makes it only a determinate universal, is also a *singular*, and conversely, because the singular is a determinate universal, it is equally a particular. If we stay at this abstract determinateness, then the concept has the three particular determinations of universal, particular, and singular, whereas earlier we gave only the universal and the particular as species of the particular. Because singularity is the turning of the concept as a negative back to itself, this turning back from abstraction, which in the turning is truly sublated, can itself be placed as an indifferent moment *alongside* the others and be counted with them.

If singularity is listed as one of the *particular* determinations of the concept, then particularity is the *totality* which embraces them all and, precisely as this totality, it is the concretion of the determinations or singularity itself. But it is a concrete also according to the previously mentioned side, as *determinate universality*; and then it is the *immediate* unity in which none of these moments is posited as distinct or as the determinant, and in this form it will constitute the *middle term of the formal syllogism*.

It follows that each of the determinations established in the preceding exposition of the concept has immediately dissolved itself and has lost itself in its other. Each distinction is confounded in the course of the very reflection that should isolate it and hold it fixed. Only a way of thinking that is *merely representational*, for which abstraction has isolated them, is capable of holding the universal, the particular, and the singular rigidly apart. Then they can be counted; and for a further distinction this representation relies on one which is *entirely external to being*, on their *quantity*, and nowhere is such a distinction as inappropriate as here. – In singularity, the earlier true relation, the *inseparability* of the determinations of the concept, is
12.51 *posited*; for as the negation of negation, singularity contains the opposition of those determinations and this opposition itself at its ground or the unity where the determinations have come together, each in the other. Because in this reflection universality is in and for itself, singularity is essentially the negativity of the determinations of the concept, but not merely as if it stood as a third something distinct from them, but because what is now *posited* is that *positedness* is *being-in-and-for-itself*; that is, what is posited is that each of the distinct determinations is the *totality*. The turning back of the determinate concept into itself means that its determination is to be *in its determinateness* the *whole* concept.

2. Singularity is not, however, only the turning back of the concept into itself, but the immediate loss of it. Through singularity, where it is *internal to itself*, the concept becomes *external to itself* and steps into actuality. *Abstraction*, which is the *soul* of singularity and so the self-reference of the negative, is, as we have seen,[45] nothing external to the universal and the particular but is immanent in them, and these are concreted through it, they become a content, a singular. But, as this negativity, singularity is the determinate determinateness, *differentiation* as such, and through this reflection of the difference into itself, the difference becomes fixed; the determining of the particular occurs only by virtue of singularity, for *singularity* is that abstraction which, precisely as singularity, is now *posited abstraction*.

The singular, therefore, is as self-referring negativity the immediate identity of the negative with itself; it *exists for itself*. Or it is the abstraction determining the concept as an *immediate*, according to its ideal moment of *being*. – Thus the singular is a *one* which is qualitative, or a *this*. In accordance with this qualitative character, it is, *first*, the repulsion of itself *from itself* by virtue of which many *other* ones are presupposed; *second*, it is now a negative reference with respect to these presupposed *others*, and to this

[45] i.e., just above, 12.49–50.

extent the singular is *exclusive*. Universality, when referred to these singulars as indifferent ones – and it must be referred to them, for they are a moment of the concept of singularity – is only their *commonality*. If by the universal one understands that which is *common* to several singulars, the *indifferent* subsistence of these singulars is then taken as the starting point, thus mixing in the immediacy of being into the determination of the concept. The lowest conception one can have of the universal as connected with the singular is this external relation that it has to the latter as a mere *commonality*.

The singular, which in the reflective sphere of concrete existence is as a *this*, does not have the *excluding* reference to the other that is characteristic **12.52** of qualitative being-for-itself. A *this* is a one *reflected into itself*, without repulsion; or the repulsion is in this reflection one with abstraction, a reflective *mediation* present in the *this* that makes it a *posited* immediacy *pointed at* by someone external to it. The *this is*; it is *immediate*, it is a *this*, however, only in so far as it is *pointed at*. This "pointing at" is the reflective movement that takes hold of itself and posits the immediacy, but as something external to itself. – Now the singular surely is also a *this*, as an immediate which is the result of mediation, but does not have this mediation outside it; it is itself repelling separation, *posited abstraction*, yet is, precisely in its separation, a positive connection.

This act of abstraction by the singular is, as the immanent reflection of difference, the first positing of the differences as *self-subsisting*, reflected into themselves. They *exist* immediately; but, further, this separating is reflection in general, the *reflective shining of one in the other*; the differences thus stand in essential relation. They are, moreover, not singulars that just *exist* next to each other; a plurality of this kind belongs to being; the *singularity* that posits itself as determinate does not posit itself in an external difference but in a difference of the concept; singularity thus excludes the *universal* from itself, but since this universal is a moment of it, it refers to it just as essentially.

The concept, as this connection of its *self-subsistent* determinations, has lost itself, for the concept itself is no longer the *posited unity* of these determinations, and these no longer are *moments*, the *reflective shining* of the concept, but subsist rather in and for themselves. – As singularity, the concept returns in determinateness into itself, and therewith the determinate has itself become totality. The concept's turning back into itself is thus the absolute, originative *partition of itself*, that is, as singularity it is posited as *judgment*.[46]

[46] There is a play on words here: "partition" = *Teilung*; "judgment" = *Urteil*.

CHAPTER 2

12.53

Judgment

Judgment is the *determinateness* of the concept *posited* in the *concept* itself. The determinations of the concept, or, what amounts to the same thing as shown,[47] the determinate concepts, have already been considered on their own; but this consideration was rather a subjective reflection or a subjective abstraction. But the concept is itself this act of abstracting; the positioning of its determinations over against each other is its own determining. *Judgment* is this positing of the determinate concepts through the concept itself.

Judging is therefore *another* function than conceiving; or rather, it is *the other function* of the concept, for it is the *determining* of the concept through itself. The further progress of judgment into a diversity of judgments is this progressive determination of the concept. What kind of determinate concepts *there are*, and how they prove to be necessary determinations of it – this has to be exhibited in judgment.

Judgment can therefore be called the first *realization* of the concept, for reality denotes in general the entry into *existence* as *determinate* being. More precisely, the nature of this realization has presented itself in such a way that the moments of the concept are totalities which, *on the one hand*, subsist on their own through the concept's immanent reflection or through its singularity; *on the other hand*, however, the unity of the concept is their *connection*.[48] The immanently reflected determinations are *determinate totalities* that exist just as essentially disconnected, indifferent to each other, as mediated through each other. The determining itself is a totality only as containing these totalities and their connections. This totality is the judgment. – The latter contains, therefore, the two self-subsistents which go under the name of *subject* and *predicate*. What each is cannot yet be said; they are still indeterminate, for they are to be determined only through the judgment. Inasmuch as judgment is the concept as determinate, the only

[47] Cf. above, 12.46. [48] Cf. above, 12.51.

determination at hand is the difference that it contains between *determinate* and still *indeterminate* concept. As contrasted to the predicate, the subject can at first be taken, therefore, as the singular over against the universal, or also as the particular over against the universal, or the singular over against the particular; so far, they stand to each other only as the more determinate and the more universal in general.

12.54 It is therefore fitting and unavoidable to have these *names*, "subject" and "predicate," for the determinations of the judgment; as names, they are something indeterminate, still in need of determination, and therefore nothing but names. It is partly for this reason that the determinations themselves of the concept could not be used for the two sides of judgment; but a still stronger reason is because of the nature of a concept determination which is nothing abstract, nothing fixed, but contains its opposite in it, explicitly posited there; since the sides of the judgment are themselves concepts and therefore the totality of the determinations of the concept, each side must run through all these determinations, exhibiting them within whether in abstract or concrete form. But now, if in this altering of determination we want to fix the two sides in some general way, names will be the most useful means, for they can be kept the same throughout the process. – But a name remains distinct from the fact or the concept, and this is a distinction that transpires within the judgment as such; since the subject is in general the determinate term and more, therefore, of an immediate *existent*, whereas the predicate expresses the *universal*, the essence or the concept, the subject as such is at first only a kind of *name*; *what it is*, is first enunciated only by the predicate which contains *being* in the sense of the concept. When we ask, "What *is* this?," or "What kind of plant *is* this?," the *being* we are enquiring about is often just a *name*, and once we learn this name, we are satisfied that we now know what the fact *is*. This is *being* in the sense of the subject. The *concept*, however, or at least the essence and the universal in general, is only given by the predicate, and when we ask for it, we do it in the sense of the judgment. – *God*, therefore, or *spirit*, *nature*, or what have you, is as the subject of a judgment only a name at first; what any such subject *is* in accordance with the concept, is first found only in the predicate. When we ask for the predicate that belongs to such subjects, the required judgment must be based on a *concept* that is presupposed; yet it is the predicate that first gives this concept. It is, therefore, the mere *representation* that in fact makes up the presupposed meaning, and this yields only a nominal definition whereby it is a mere accident, a historical fact, what is understood by a name. So many disputes about whether a predicate does or does not belong to a subject are, therefore, nothing more

than verbal disputes, for they proceed from this form; what lies at the base (*subjectum*, ὑποκειμενον) is still nothing more than a name.

Secondly, we now have to examine more closely how the *connection* of subject and predicate in judgment is determined, and how the two are themselves thereby determined. Judgment has in general totalities for its
12.55 sides, totalities that are at first essentially self-subsistent. The unity of the concept is at first, therefore, only a *connection of* self-subsistent terms; it is not yet the *concrete*, the *fulfilled* unity that has returned into itself from this reality but is a unity rather *outside* which the two terms persist as *extremes yet unsublated in it*. – Now any consideration of the judgment can start either from the originative unity of the concept or from the self-subsistence of the extremes. Judgment is the self-diremption of the concept; therefore, it is by starting from the *unity of the concept* as ground that the judgment is considered in accordance with its *true* objectivity. In this respect, judgment is the *originative division* (*or Teilung*, in German) of an originative unity; the German word for judgment, *Urteil* (or "primordial division"), thus refers to what judgment is in and for itself. But the concept is present in the judgment as *appearance*, since its moments have attained self-subsistence there, and it is to this side of *externality* that *ordinary representation* is more likely to fasten.

From this *subjective* standpoint, the subject and the predicate are therefore treated as ready-made, each for itself outside the other – the subject as a subject matter that would exist even if it did not have that predicate, and the predicate as a universal determination that would exist even without accruing to this subject. The act of judgment accordingly brings with it the further reflection whether this or that predicate which is in someone's *head* can and should be *attached* to the subject matter that exists *outside* it on its own; the judgment itself is simply the act that *combines* the predicate with the subject, so that, if this combination did not occur, the subject and predicate would still each remain what it is, the one concretely existing as thing in itself, the other as a representation in someone's head. – But the predicate which is combined with the subject should also *pertain* to it, which is to say, should be in and for itself identical with it. The significance of their being *combined* is that the *subjective* sense of judgment, and the indifferent external persistence of the subject and predicate, are again sublated. Thus in "this action *is* good," the *copula* indicates that the predicate belongs to the *being* of the subject and is not merely externally combined with it. Of course, *grammatically* speaking this kind of subjective relation that proceeds from the indifferent externality of subject and predicate is perfectly valid, for it is *words* that are here externally combined. – It can also

be mentioned in this context that a *proposition* can indeed have a subject and predicate in a grammatical sense without however being a *judgment* for that. The latter requires that the predicate behave with respect to the subject in a relation of conceptual determination, hence as a universal with respect to a particular or singular. And if what is said of a singular subject is itself only something singular, as for instance, "Aristotle died at the age of 73 in the fourth year of the 115th Olympiad," then this is a mere proposition, not a judgment. There would be in it an element of judgment only if one of the circumstances, say, the date of death or the age of the **12.56** philosopher, came into doubt even though the stated figures were asserted on the strength of some ground or other. In that case, the figures would be taken as something universal, as a time that, even without the determinate content of Aristotle's death, would still stand on its own filled with some other content or simply empty. Likewise would the news that my friend N. has died be a proposition, and a judgment only if there were a question as to whether he is actually dead and not just apparently dead.

In the usual definition of judgment, that it is the *combination of two concepts*, we may indeed accept the vague expression of "combination" for the external *copula*, and also accept that the terms combined are at least *meant* to be concepts. But the definition is otherwise a highly superficial one. It is not just that in the disjunctive judgment, for instance, there are more than *two* so-called concepts that are combined; more to the point is rather that the definition is much better than the matter defined, for it is not *determinations* of concepts, but *determinations of representation* that are in fact meant; it was remarked in connection with the concept in general, and with the concept as determinate, that what usually goes under this name of concept does not deserve the name at all;[49] where should concepts then come from in the case of judgment? – Above all this definition of judgment ignores what is essential to it, namely the difference of its determinations; still less does it take into account its relation to the concept.

As regards the further determination of the subject and predicate, we have remarked above[50] that it is in judgment that they must first receive their determination. But since judgment is the posited determinateness of the concept, this determinateness possesses the given differences *immediately* and *abstractly* as *singularity* and *universality*. – But inasmuch as judgment is in general the *immediate existence* or the *otherness* of the concept that has not yet restored itself to the unity through which it exists *as* concept, there also emerges the determinateness that is void of concept,

[49] Cf. above, 12.40. [50] Cf. above, 12.53, 54.

the opposition of *being* and reflection or the *in-itself*. But since the concept constitutes the essential *ground* of judgment, these determinacies are at least indifferent in the sense that, when one accrues to the subject and the other to the predicate, the converse relation equally holds. The subject, being the *singular*, appears at first as the *existent* or as *the one that exists for itself* with the determinate determinateness of a singular on which judgment is passed – as an actual object even when it is such in representation only – as for instance in the case of bravery, right, agreement, etc. The *predicate*, which is the *universal*, appears on the contrary as the *reflection* of this
12.57 judgment on that object, or rather as the object's immanent reflection that transcends the immediacy of the judgment and sublates its determinacies as mere existents – appears, that is, *as the object's in-itselfness*. – In this way, the start is made from the singular as the first, the immediate, and through the judgment this singular is *raised to universality*, just as, conversely, the universal that exists only *in itself* descends in the singular into existence or becomes a being that *exists for itself*.

This significance of the judgment is to be taken as its *objective* meaning and at the same time as the *true significance* of the previous forms of transition. The existent *comes to be* and *becomes another*, the finite *passes over* into the infinite and in it *passes away*; the existent *comes forth* into appearance *out of* its *ground* and *to this ground* it *founders*; the accidents *manifest* the *wealth* of substance as well as its *might*; in being, there is *transition* into an *other*; in essence, there is the reflective shining in an other that manifests the *necessity* of a connection. This transition and this reflective shining have now passed over into the *originative division of the concept in judgment*, and this division, in bringing the singular back to the *in-itselfness* of its universality, equally determines the universal as something *actual*. These two are one and the same – the positing of singularity in its immanent reflection and of the universal as determinate.

But equally pertaining to this objective meaning is that the said differences, as they re-occur in the determinateness of the concept, are at the same time posited as only appearing, that is to say, that they are nothing fixed but accrue rather just as much to one determination of the concept as to the other. The subject is therefore equally to be taken as the *in-itself*, and the predicate as *determinate existence* in contrast to it. The *subject without the predicate* is what the *thing without properties*, the *thing-in-itself*, is in the sphere of appearance, an empty indeterminate ground; it is then the *implicit concept* that receives a difference and a determinateness only in the predicate; the predicate thus constitutes the side of the *determinate existence* of the subject. Through this determinate universality the subject

refers to the outside, is open to the influence of other things and thereby confronts them actively. *What is there* comes forth from its *in-itselfness* into the *universal element* of combination and relations, into negative references and into the interplay of actuality which is a *continuation* of the singular into other singulars and is, therefore, universality.

Yet the identity just indicated, the fact that the determination of the subject accrues equally to the predicate and vice versa, is not just a matter for our consideration; it is not only *in itself* but is also posited in the judgment; for the judgment is the reference connecting the two; the copula expresses that *the subject is the predicate*. The subject is the determinate **12.58**
determinateness, and the predicate is this determinateness of the subject as *posited*; the subject is determined only in its predicate, or is subject only in it; in the predicate, it is turned back into itself and is therein the universal. – Now in so far as the subject is the self-subsistent term, this identity has the relation that the predicate does not possess a self-subsistence of its own but has its subsistence only in the subject; it *inheres* in the subject. Accordingly, since the predicate is distinguished from the subject, it is only a *singularized* determinateness of the subject, only *one* of its properties; the subject itself is however the *concrete*, the totality of manifold determinacies, just as the predicate contains *one* of them; the subject is the universal. – But, on the other hand, the predicate also is self-subsistent universality, and the subject conversely only one determination of it. The predicate thus *subsumes* the subject; the singularity and the particularity are not for themselves but have their essence and their substance in the universal. The predicate expresses the subject in its concept; the singular and the particular are to the subject accidental determinations; the subject is their absolute possibility. When by "subsumption" an external connection of subject and predicate is thought, and the subject is represented as something self-subsistent, then subsumption refers to the subjective act of judging mentioned above, namely the judging that starts off from the self-subsistence of *both subject and predicate*.[51] Subsumption is then only the *application* of the universal to a particular or singular posited *under* it in accordance with an indeterminate representation, one of lesser quantity.

When we treat the identity of subject and predicate as meaning that *at one time* one determination of the concept belongs to the subject and the other to the predicate, and *at another time* the converse equally applies, then the identity is as yet still *implicit*; on account of the self-subsistent diversity of the two sides of judgment, their *posited* connection also has

[51] Cf. above, 12.55.

the two at first as diverse. But it is the *identity void of difference* that in fact constitutes the *true* connection of the subject and predicate. The determination of the concept is itself essentially a *connection*, for it is a *universal*; the same determinations, therefore, which the subject and the predicate each have, are also had by their connection. The connection is *universal*, for it is the positive identity of both, of the subject and predicate; but it is also *determinate*, for the determinateness of the predicate is the determinateness of the subject; it is *singular* as well, for in it the self-subsisting extremes are sublated as in their negative unity. – In judgment, however, this identity is not posited yet; the copula is as the still indeterminate connection of being in general, "A *is* B," for the self-subsistence of the concept's determinacies, or the extremes, is in judgment the *reality* that the concept has
12.59 within. If the "is" of the copula were already *posited* as the determinate and fulfilled *unity* of subject and predicate earlier mentioned,[52] were *posited* as their *concept*, it would then already be *the conclusion of syllogistic inference*.[53]

To restore again this *identity* of the concept, or rather to *posit* it – this is the goal of the *movement* of the judgment. What is already *present* in the judgment is, on the one hand, the self-subsistence but also reciprocal determinateness of the subject and predicate, and, on the other hand, their still *abstract* connection. "The subject is the predicate" – this is what the judgment says at first. But since the predicate is *not* supposed to be what the subject is, a *contradiction* is at hand that must *resolve* itself, must *pass over* into a result. Or rather, since the subject and predicate are *in and for themselves* the totality of the concept, and judgment is the reality of the concept, the judgment's forward movement is only *development*; what comes forth from it is already present in it, and to this extent the *demonstration* is a *display*,[54] a reflection as the *positing* of that which is already *at hand* in the extreme terms of the judgment; but even this positing is already present; it is the *connection* of the extremes.

First, as *immediate*, judgment is the judgment of *existence*; its subject is immediately an *abstract*, *existent singular*, and the predicate is an *immediate determinateness* or property of it, an abstract universal.

Second, as this qualitative character of the subject and predicate is sublated, the determination of the one begins *to shine reflectively* in the other; the judgment is now the judgement of *reflection*.

[52] Cf. above, 12.55. [53] "syllogistic inference" = *Schluß*.

[54] "display" = *Monstration*. Hegel is playing on the Latinate words *Demonstration* and *Monstration*, the Latin root of which means "displaying" or "exhibiting."

But this external combination passes over into the *essential identity* of a substantial, *necessary combination*; and so we have, *third*, the judgment of *necessity*.

Fourth, since in this essential identity the difference of subject and predicate has become a form, the judgment becomes *subjective*; it entails the opposition of the *concept* and its *reality* and the comparison of the two; it is the *judgment of the concept*.

This emergence of the concept grounds the *transition of judgment into syllogistic inference*.

A. THE JUDGMENT OF EXISTENCE

In the subjective judgment we expect to see *one and the same* object *double*, once in its singular actuality, and again in its essential identity or in its concept: the singular raised into its universality or, what is the same thing, **12.60**
the universal made singular into its actuality. The judgment is thus *truth*, for it is the agreement of the concept and reality. But it is not *at first* constituted in this way, for *at first the judgment is immediate*, since as yet no reflection and no movement of the determinations has been found in it. This *immediacy* renders the first judgment a *judgment of immediate existence*; we can also call it a *qualitative judgment*, but only in so far as *quality* does not apply to the determinateness of *being* alone but also extends to the universality which, because of its simplicity, likewise has the form of *immediacy*.

The judgment of existence is also the judgment of *inherence* because, though immediacy is its determination, it is the subject that in the distinction between subject and predicate is the immediate and hence the first and the essential term in the judgment, and the predicate consequently takes on the form of something that does not subsist on its own but has its foundation in the subject.

a. The positive judgment

1. The subject and predicate, as we have just said,[55] are names at first that receive their actual determination only as the judgment runs its course. However, as sides of the judgment – the judgment being the *posited* determinate concept – they have the determination of moments of the concept, but, on account of their immediacy, this determination is as yet quite

[55] Cf. above, 12.54.

simple, still not enriched by mediation and also still caught up in the abstract opposition of *abstract singularity* and *abstract universality*. – The predicate, to speak of it first, is the *abstract* universal; this abstract is conditioned by mediation, by the sublation of singularity and particularity, but so far such a mediation is here only a *presupposition*. In the sphere of the concept there can be no other immediacy than the one that contains mediation *in and for itself* and has arisen only through its sublation; this is the *immediacy of the universal*. Thus *qualitative being* also is *in its concept* a universal; as *being*, however, the immediacy is not yet *posited* as such; it is only as *universality* that immediacy is the concept determination in which it is *posited* that negativity essentially belongs to it. This connection is given in the judgment in which universality is the predicate of a subject. – Similarly the subject is an *abstract* singular, or the *immediate* which is supposed *to be such* and therefore the singular as a *something* in general. The subject constitutes, therefore, the abstract side of the judgment, the side in it according to which the concept has passed over into *externality*. – As
12.61 these two concept determinations are determined, so is also their connection, the "is" or the copula; it too can have no other meaning than that of an immediate, abstract *being*. It is because of this connection, which still does not contain any mediation or negation, that this judgment is called "positive."

2. The first pure expression of the positive judgment is, therefore, the proposition: *the singular is universal*. This expression must not be put in the form of "A is B," for A and B are totally formless and hence meaningless names, whereas judgment in general, and therefore already the judgment of existence, has determinations of the concept for its extremes. "A is B" can stand just as well for any mere *proposition* as for a *judgment*. But what is asserted in every judgment, even one more richly determined in form, is the proposition that has this determined content, namely, "the singular is universal," for every judgment is in principle also an abstract judgment. (Regarding the negative judgment, how far it likewise comes under this expression, of this we shall speak presently.)[56] – However, if no thought is given to the fact that with every judgment, the positive at least, the assertion is made that the singular is universal, this happens either because *no attention* is given to the *determinate form* differentiating subject and object – for it is taken for granted that the judgment is nothing but the connecting of *two* concepts – or also likely because the further *content* of the judgment, "Gaius is learned," or "the rose is red," comes drifting in

[56] Cf. below, 12.65.

before the mind, and the latter, busy with the picture of Gaius etc., fails to reflect on the form – even though, at least, such a content as "Gaius," which is the one that usually has to be dragged in as an example, is much less interesting than the form, and is indeed chosen because it is uninteresting, not to divert attention from the form to itself.

The objective meaning of the proposition stating that *the singular is universal* conveys, as already incidentally noted,[57] both the perishableness of singular things and their positive subsistence in the concept in general. The concept itself is imperishable, but that which emerges from it in its division is subjected to alteration and to falling back into its *universal* nature. But the universal, conversely, gives itself a *determinate existence*. Just as essence goes out into *reflective shine* in its determinations; or ground into concrete existence in *appearance*; and substance into manifestation in its accidents, so does the universal *resolve* itself into the singular; judgment is this *resolution* of the universal, the *development* of the negativity which, implicitly, it already is. – This last circumstance is expressed by the converse proposition, "the universal is singular," which is also equally spoken in the positive judgment. The subject, the *immediate singular* at first, is in the judgment itself referred to its *other*, namely the universal; it is thereby posited as the *concrete* – according to the category of being, as a something *of many* **12.62**
qualities; or as the concrete of reflection, *a thing of manifold properties*, an *actual of manifold possibilities*, a *substance* of precisely such *accidents*. Because these manifolds here belong to the subject of the judgment, the something, the thing, etc., is in its qualities, properties, or accidents, reflected into itself, or *continues* across them, maintaining itself in them and them in itself. Positedness or determinateness belongs to being which is in and for itself. The subject is therefore inherently the *universal*. – The predicate, on the contrary, being this *universality* not as real or concrete, but as *abstract*, is in contrast to the subject the *determinateness*; it contains only *one moment* of the subject's totality to the exclusion of the others. On account of this negativity, which as an extreme of the judgment is at the same time self-referring, the predicate is an *abstract singular*. – For instance, in the proposition, "the rose is fragrant," the predicate expresses only *one* of the *many* properties of the rose; it isolates it, whereas in the subject the property is joined with the others; likewise in the dissolution of the thing, the manifold properties that inhere in it *become isolated* in acquiring self-subsistence as *materials*. From this side, then, the proposition of the judgment says: *the universal is singular*.

[57] Cf. above, 12.57.

By juxtaposing this *reciprocal determination* of subject and predicate in the judgment, we thus obtain this twofold result. (1) Immediately, the subject is indeed an existent or the singular, while the predicate is the universal. But because the judgment *connects* the two, and the subject is determined as universal by the predicate, the subject is then the universal. (2) The predicate is determined in the subject, for it is not a determination *in general* but the determination rather *of the subject*. "The rose is fragrant." This fragrance is not some indeterminate fragrance or other, but the fragrance of the rose. The predicate is therefore *a singular*. – Now since the subject and predicate stand related in the judgment, they should retain the opposition of concept determinations; likewise, in the *reciprocity* of causality, before the latter attains its truth, the two sides are still supposed to remain self-subsistent and mutually opposed as against the equality of their determination. Therefore, when the subject is determined as universal, the predicate should not also be taken in its determination of universality, for then we would have no judgment; it must rather be taken only in its determination of singularity. And if the subject is determined as singular, then the predicate is to be taken as universal. – If we reflect on the mere identity above, then we have these two identical propositions, "the singular is singular," "the universal is universal," in which the sides of the judgment would have completely fallen apart; only the self-reference of each is
12.63 expressed while the reference connecting them to each other is dissolved; and thus the judgment would be sublated. – Of the two propositions we drew, the first, "the universal is singular," expresses the judgment according to its *content*, as an isolated determination in the predicate and as the totality of determinations in the subject. The other, "the singular is universal," expresses it according to *form* as immediately given through the judgment itself. – In the immediate positive judgment, the extremes are still simple: form and content are therefore still united. Or, in other words, it does not consist of two propositions; the twofold connection that it yielded immediately constitutes the *one* positive judgment. For its extremes are (a) the self-subsisting abstract determinations of judgment, and (b) each side of the determination is determined through the other by virtue of the copula connecting them. *Implicitly*, however, the difference of form and content is for this reason present in it, as we have seen; and indeed, what the first proposition contains, that the singular is universal, belongs to form, for the proposition expresses the *immediate determinateness* of the judgment. The relation, on the contrary, which the other proposition expresses, that *the universal is singular* or that the subject is determined as universal whereas the predicate is determined as particular or singular, concerns the *content*;

for its determinations are only the result of an immanent reflection by virtue of which the immediate determinacies of the judgment are sublated and the form is thereby converted into an identity that has withdrawn into itself and persists over against the distinction of form: it converts itself into content.

3. If now the two propositions, the one of form and the other of content,

(Subject) (Predicate)
The singular is universal
The universal is singular,

were to be united because they are contained in the *one* positive judgment, so that both, the subject as well as the predicate, were determined as the unity of singularity and universality, then both the subject and predicate would be the *particular*, and this must be recognized as *implicitly* their inner determination. However, this combination would be arrived at only through an external reflection; moreover, the proposition that results from it, "the particular is the particular," would no longer be a judgment but an empty identical proposition as were the two propositions already found in the positive judgment, "the singular is singular," and "the universal is universal." – Singularity and universality cannot yet be united into particularity, because in the positive judgment they are still posited as *immediate*. – Or again, the judgment must still be distinguished according to its form and its content, because the subject and predicate are themselves still distinguished as immediacy and mediated, or because the judgment, according to its connection, is both the self-subsistence of the connected **12.64** terms and their reciprocal determination or mediation.

In first place, then, the meaning of the judgment when considered according to its form is that *the singular is universal*. But in fact such an *immediate singular* is *definitely not* universal; its predicate is of wider extension, does not correspond to it. The subject is a *being existing immediately for itself*, and hence the *opposite* of that abstraction, of that universality posited through mediation that was supposed to be predicated of it.

In second place, if the judgment is considered according to its *content*, or as the proposition, "the universal is singular," then the subject is a universe of qualities, an infinitely determined concrete universe, and since its determinacies are as yet qualitites, properties, or accidents, its totality is the *bad infinite plurality* of them. Such a subject, therefore, is not at all the one *single* property that its predicate declares. Consequently, both propositions must be *united*, and the positive judgment must be posited as *negative* instead.

b. The negative judgment

1. We spoke earlier of the common notion that whether the content of a judgment is true or false depends solely on the content itself, since logical truth concerns only the form and its only requirement is that such content shall not contradict itself.[58] Nothing else is reckoned as the form of judgment except that the latter is a connection of *two* concepts. But we have seen that these two concepts are not just the relationless determination of a *sum*, but that they relate to each other as *singular* and *universal*.[59] These are the determinations that constitute the truly logical *content* and also, abstracted in that way, the content of the positive judgment; whatever *other content* is in a judgment ("the sun is round," "Cicero was a great Roman orator," "it is daytime now," etc.) does not concern the judgment as such; the judgment only says that the *subject* is *predicate*, or, since these are only names, that *the singular is universal and vice versa*. – It is because of this *purely logical content* that the positive judgment is *not true* but has its truth in the negative judgment. – In judgment, so it is required, the content simply ought not to contradict itself; but it does contradict itself in the positive judgment, as we have just seen. – At any rate, it makes absolutely no difference if that logical content is called form, and by content is understood only the remaining empirical filling, for even then the form would not contain a mere empty identity outside which the
12.65 content determination would then lie. The positive judgment has in fact no truth through its form as positive judgment; whoever calls *truth* the *correctness* of an *intuition* or a *perception*, the agreement of *representation* with the subject matter, has for a minimum no expression left for that which is the subject matter and the aim of philosophy. We should at least say of these that they are the truth of reason, and it will surely be granted that such judgments as "Cicero was a great orator," that "it is daytime now," are definitely not truths of reason. But they are not such truths, not because they have an empirical content as it were contingently, but because they are only positive judgments that can have, and ought to have, no other content than an immediate singular and an abstract determinateness.

The positive judgment first attains its truth in the negative judgment: *the singular is not* abstractly *universal – but rather*, the predicate of the singular, because it is such a predicate, or because, if considered by itself without reference to the subject, it is an *abstract* universal, is for that very reason itself something determinate; *from the start*, therefore, the *singular*

[58] Cf. above, 12.27. [59] Cf. above, 12.61.

is a *particular*. Furthermore, with respect to the other proposition that the positive judgment contains, the meaning of the negative judgment is that the *universal* is not abstractly *singular but* that this predicate, "singular," by the very fact that it is a predicate, or because it refers to a universal subject, is more than just mere singularity, and the *universal*, accordingly, is *from the start* equally a *particular*. – Since this universal, as subject, is itself in the judgment determination of singularity, the two propositions both reduce to one: "the singular is a particular."

We may remark that (a) the *particularity* that here comes to the predicate has already come up for consideration before;[60] here, however, it is not posited by external reflection but has arisen rather as mediated by the negative connection indicated in the judgment. (b) This determination results here only for the predicate. In the *immediate* judgment, the judgment of existence, the subject is the underlying basis; the *determination* seems at first, therefore, *to occur in the predicate*. But in fact this first negation cannot as yet be a determination, or cannot truly be the *positing of the singular*, for such a positing is only a *second moment*, the negative of the negative.

The singular is a particular: this is the *positive* expression of the negative judgment. This expression, therefore, is not the positive judgment itself, for the latter, because of its immediacy, has an abstraction for its extremes, while the particular, precisely through the positing of the judgment connection, results as the first *mediated* determination. – But this determination is not to be taken only as a moment of the extremes, but also as the *determination* **12.66**
of the *connection*, as it truly is from the start; in other words, the judgment is also to be considered as *negative*.

This transition is founded on the relation of the extremes and on their connection in the judgment as such. The positive judgment is the connection of the singular and the universal which are such *immediately* and each, therefore, is *not* at the same time what the other is. The connection is therefore just as essentially *separation*, or *negative*; for this reason the positive judgment was to be posited as negative. There was no need, therefore, for the logicians to make such a fuss about the *not* of the negative judgment being attached to the *copula*. In the judgment, the *determination* of the extremes is equally a *determinate connection*. The judgment determination, or the extreme, is not the purely qualitative one of *immediate* being that only stands over against an *other outside* it. Nor is it the determination of reflection, which, in accordance with its general form, behaves positively and negatively, posited in either case as exclusive, only *implicitly* identical

[60] Cf. above, 12.63.

with the other. The judgment determination, as the determination of the concept, is a universal within, posited as *extending continuously* in its other. Conversely, the judgment *connection* is the same determination as the extremes have; for it is precisely this universality and continuous extension of each into the other; in so far as these are distinguished, the connection also has negativity in it.

The just stated transition from the form of the *connection* to the form of the *determination* has the *immediate consequence* that the *not* of the copula must just as equally be attached to the predicate and that the latter must be determined as the *not-universal*. But, through a no less immediate consequence, the not-universal is the *particular*. – If the focus is on the *negative* according to the totally abstract determination of immediate *non-being*, then the predicate is the *totally indeterminate* not-universal. This is the determination which is normally treated in logic in connection with the *contradictory* concepts, and the further point is made – a point considered important – that in the *negative* of a concept one should only focus on the negative, taking it as the mere *indeterminate* extent of the *other* of the positive concept. Thus the mere *not-white* would be just as much red, yellow, blue, etc. as black. *White*, however, is an *unconceptualized* determination of intuition; the *not* of white is equally, then, unconceptualized *not-being*, the abstraction that came in for consideration at the very beginning of the Logic where *becoming* was recognized to be its closest truth. To use as an example, in the consideration of judgment determinations, an unconceptualized content of this sort, drawn from intuition and the imagination,
12.67 and to take the determinations of *being*, and of *reflection*, as such judgment determinations, is the same *uncritical* practice as when Kant applies the concepts of the understanding to the infinite idea of reason, the so-called *thing-in-itself*;[61] the *concept*, to which the *judgment* proceeding from it also belongs, is the true *thing-in-itself* or the *rational*; those other determinations belong to *being* and *essence*; they are not yet forms developed into the shape where they are in their truth, *in the concept*. – If we stop at white, red, as representations *of the senses*, then we call concept what is only a determination of pictorial representation. This is common practice. But then, surely, the not-white, the not-red, will be nothing positive, just as the not-triangular will be something totally indeterminate, for a determination based as such on number and quantum is essentially *something indifferent*, *void of concept*. Yet, like *non-being* itself, such a sensuous content ought to be *conceptualized*; ought to shed that indifference and abstract immediacy

[61] Cf. B166, note.

with which it is affected in the blind immobility of pictorial representation. Already in the sphere of immediate existence, the *non-being* which is otherwise void of thought becomes *limit*, and by virtue of this limit the *something refers* to an *other* despite itself. In the sphere of reflection, on the other hand, it is the *negative* that *refers essentially* to a *positive*, and is thereby *determined*; a negative is no longer that *indeterminate non-being*, for it is posited to be only to the extent that the positive stands over against it, and as third comes their *ground*; the negative is thus held circumscribed in a sphere within which the *non*-being of one is something *determinate*. – But it is all the more in the absolutely fluid continuity of the concept that the *not* is immediately a positive, and the *negation* is not just determinateness but is taken up into universality and is posited as identical with it. The non-universal is therefore directly the *particular*.

2. Since negation has to do with the connection of judgment, and we are considering the *negative judgment* still as such, the latter is *in the first instance still a judgment*; we thus have the relation of subject and predicate, or of singularity and universality, and their connection, *the form of the judgment*. The subject, as the immediate underlying basis, remains untouched by the negation; it retains, therefore, its determination of having a predicate, or its reference to the universality. Consequently, what is negated in the predicate is not the universality as such, but the abstraction or the determinateness of the predicate that appeared as *content* in contrast to that universality. – The negative judgment is not, therefore, total negation; the universal sphere which contains the predicate remains standing; the connection of subject and the predicate is therefore still essentially *positive*; the yet remaining *determination* of the predicate is no less *connection*. – When **12.68** it is said that, for instance, the rose is *not* red, only the *determinateness* of the predicate is thereby denied and thus separated from the universality which equally attaches to it; the universal sphere, *color*, is retained; if the rose is not red, it is nonetheless assumed that it has a color, though another color. From the side of this universal sphere, the judgment is still positive.

"*The singular is a particular*." This positive form of the negative judgment immediately expresses that the particular contains universality. In addition, it also expresses that the predicate is not just a universal but also one which is still determinate. The negative form contains the same, for although the rose, for instance, is not red, it is supposed, nevertheless, not only still to retain the universal sphere of color as predicate, but to have *some other determinate color* as well; the *singularity* of determinateness of the rose is therefore only sublated; and not only is the universal sphere left

standing but determinateness too is retained, although transformed into an *indeterminate* determinateness, a universal determinateness, that is to say, into particularity.

3. The *particularity* that has resulted as the positive determination of the negative judgment is the term mediating singularity and universality; so the negative judgment is now that which provides in general the mediation for the third step, that of *the reflection of the judgment of existence into itself*. This judgment is according to its objective meaning only the moment of the alteration of accidents, or, in the sphere of existence, of the singularized properties of the concrete. Through this alteration, the full determinateness of the predicate, or the concrete, emerges as posited.

"The singular is particular" is what the positive expression of the negative judgment says. But the singular is also *not* particular, for particularity is of wider extension than singularity; it is a predicate, therefore, that does not correspond to the subject, one in which the latter, therefore, does not as yet have its truth. "*The singular is only a singular*": this is a negativity that refers to nothing else, be it positive or negative, except itself. – The rose is not a thing of *some color or other*, but one that only has the one determinate color which is the rose-color. The singular is not an indeterminate determinate but the determinate determinate.

This negation of the negative judgment appears, when one starts from its positive form, to be again a *first* negation. But this is not what it is. The negative judgment is again, in and for itself, already the second negation or the negation of negation, and this, what it is in and for itself, is to be posited. To wit: the judgment *negates the determinateness* of the predicate of the positive judgment, its *abstract* universality, or, considered as content, the singular quality that it possesses of the subject. But the negation of the determinateness is already the second negation, hence the infinite turning
12.69 back of the singularity into itself. With this, therefore, the *restoration* of the concrete totality of the subject has taken place, or rather, the subject is now for the first time *posited* as singular, for through the negation and the sublation of that negation it is mediated with itself. The predicate, for its part, has thereby passed over from the first universality to absolute determinateness and made itself equal to the subject. Thus the judgment says: "the singular is singular." – From the other side, since the subject was equally to be taken as *a universal*, and since in the negative judgment the predicate, which as against that subject is the singular, *expanded into particularity*; moreover, since now the negation of this determinateness is equally the *purification* of the universality contained in the predicate, this judgment also says: "the universal is the universal."

In these two judgments, which were earlier obtained through external reflection,[62] the predicate is already expressed in its positivity. But the negation of the negative judgment must itself first appear in the form of a negative judgment. It has just been shown that there still remained in this judgment a *positive connection* of subject and predicate as well the *universal sphere* of the latter.[63] From this side, the negative judgment thus contains a universality which is more purified of limitation than was contained by the positive judgment and is for this reason all the more to be negated of the subject as a singular. In this manner, the *whole extent* of the predicate is negated, and there is no longer any positive connection between it and the subject. This is the *infinite judgment*.

c. The infinite judgment

The negative judgment is as little of a true judgment as the positive. But the infinite judgment which is supposed to be its truth is, according to its negative expression, the *negative infinite*, a judgment in which even the form of judgment is sublated. – But this is a *nonsensical judgment*. It ought to be *a judgment*, and hence contains a connection of subject and predicate; but any such connection ought not *at the same time to be* there. – The name of the infinite judgment does indeed occur in the common textbooks of logic, but without any clarification as to its meaning. – Examples of negatively infinite judgments are easy to come by. It is a matter of picking determinations, one of which does not contain not just the determinateness of the other but its universal sphere as well, and of combining them negatively as subject and predicate, as when we say, for example, that spirit is not red, yellow, etc., is not acid, not alkali, etc., or that **12.70** the rose is not an elephant, the understanding is not a table, and the like. – These judgments are *correct* or *true*, as it is said, and yet, any such truth notwithstanding, nonsensical and fatuous. – Or, more to the point, they are *not judgments at all*. – A more realistic example of the infinite judgment is the *evil* action. In *civil litigation*, when a thing is negated as the property of another party, it is still conceded that the same thing would indeed belong to that party if the latter had a right to it. It is only under the title of right that the possession of it is challenged; in the negative judgment, therefore, the universal sphere, "right," is still acknowledged and maintained. But *crime* is the *infinite judgment* that negates, not only the *particular* right, but the universal sphere, the *right as right*. It has *correctness*, in the sense that it

[62] Cf. above, 12.63. [63] In the preceding page.

is an effective action, but since it stands in a thoroughly negative fashion with respect to the morality that constitutes its sphere, it is nonsensical.

The *positive* element of the infinite judgment, the negation of the negation, is the *reflection of singularity* into itself by virtue of which the singularity is first posited as the determinate determinate. "The singular is singular" is what the infinite judgment said according to that reflection. In the judgment of existence, the subject is as the *immediate singular*, hence more of just a *something* in general. Through the mediation of the negative and infinite judgment, it is *posited* as singular for the first time.

The singular is thus *posited* as *expanding* into *its predicate*, which is identical with it; to the same extent, therefore, universality is also no longer anything *immediate* but a *summing* of distincts. The positively infinite judgment equally says, "the universal is universal," and in this the universal is posited also as a turning back into itself.

Now through the reflection of the judgment determinations into themselves, the judgment has sublated itself; in the negatively infinite judgment, the difference is, so to speak, too great for it still to remain a judgment; subject and predicate have no positive connection whatsoever to each other; in the positively infinite judgment, on the contrary, only identity is present, and because of this total lack of difference there is no longer a judgment.

More precisely, it is the *judgment of existence* that has sublated itself and, consequently, there is *posited* what the *copula* of the judgment contains, namely that in its identity the qualitative extremes are sublated. But since this unity is the concept, it is immediately torn apart and is a *judgment*, but one whose terms are no longer immediately determined but are reflected into themselves. *The judgment of existence* has passed over into the *judgment*
12.71 *of reflection*.

B. THE JUDGMENT OF REFLECTION

In the judgment that has now arisen, the subject is a singular as such; and similarly, the universal is no longer an *abstract* universality, or a *singular property*, but is posited as a universal that has collected itself together into a unity through the connection of different terms, or, regarded from the standpoint of the content of diverse determinations in general, as the *coalescing* of manifold properties and concrete existences. – If examples of predicates of judgments of reflection are to be given, they must be of another kind than for the judgments of existence. It is only in the judgment of reflection that we first have a *determinate content* strictly speaking, that is, a content as such; for the content is the form determination reflected into

identity as distinct from the form in so far as this is a distinct determinateness – as it still is as judgment. In the judgment of existence, the content is merely an immediate, or abstract, indeterminate content. – These may therefore serve as examples of judgments of reflection: the human being is *mortal*, things are *perishable*, this thing is *useful*, *harmful*; *hardness*, *elasticity* of bodies, *happiness*, etc., are predicates of this particular kind. They express an essentiality which is however a *relational* determination, or a *comprehensive* universality. This *universality*, which will further determine itself in the movement of the judgment of reflection, is still distinct from the *universality of the concept* as such; although it is no longer the abstract universality of the qualitative judgment, it still has a connection to the immediate from which it proceeds and has the latter at the basis of its negativity. – The concept determines immediate existence, in the first instance, to *relational determinations* that extend across the diverse multiplicity of concrete existence, so that the true universal is indeed the inner essence of that multiplicity, but is such *in the sphere of appearance*, and this *relative nature* or even its *mark* is not as yet the element of the multiplicity that exists in and for itself.

It may seem fitting to define the judgment of reflection as a judgment of *quantity*, just as the judgment of existence was defined also as *qualitative* judgment. But just as the *immediacy* in the latter was not just *there*, but was an immediacy which is also essentially mediated and *abstract*, so, here also, that same immediacy which is now sublated is not just sublated quality, **12.72** and therefore not merely *quantity*; on the contrary, just as quality is the most external immediacy, so is quantity, in the same way, the *most external determination* belonging to mediation.

Also to be noted concerning the *determination* as it appears in the movement of the judgment of reflection is that, in the judgment of immediate existence, the movement of the determination showed itself in the *predicate*, for this kind of judgment was in the determination of immediacy and its subject, therefore, appeared as the underlying basis. For a similar reason, in the judgment of reflection the onward movement of determination runs its course *in the subject*, for this judgment has the *reflected in-itselfness* for its determination. Hence the essential is here the *universal* or the predicate, and it is the latter, therefore, that constitutes *the basis* against which the subject is to be measured and determined accordingly. – Yet the predicate also receives a further determination through the further development of the form of the subject, but it receives it *indirectly*, whereas the progression of the subject manifests itself, for the reason just given, as a *direct* advance in determination.

As regards the objective signification of the judgment, the singular enters into existence by virtue of its universality, but it does so in an essential determination which is relational, in an essentiality that maintains itself across the manifold of appearance; the subject *is supposed* to be that which is determined in and for itself; this is the determinateness which it has in its predicate. The singular, for its part, is reflected into this predicate which is its universal essence; to this extent, the subject is a concrete existence and a phenomenal something.[64] In this judgment, the predicate no longer *inheres* in the subject, for it is rather *the implicit being* under which the singular subject is *subsumed* as an accidental. If the judgments of existence can also be defined as *judgments of inherence*, then the judgments of reflection are by contrast *judgments of subsumption*.

a. The singular judgment

Now the immediate judgment of reflection is again, "the singular is universal," but with the subject and predicate in the signification just explained. More accurately, therefore, it can also be expressed thus, "this is an essential universal."

But a "this" is *not* an essential universal. That *positive* judgment – positive according to form – must as judgment be taken negatively. But inasmuch as the judgment of reflection is not merely something positive, the negation does not directly affect the predicate – a predicate which does not inhere in the subject but is rather its *implicit being*. On the contrary, it is the subject that is alterable and needs determination. The negative judgment is therefore to be understood as saying: "*'not a this'* is a universal of reflection";[65] such an *in-itself* has a more universal concrete existence than it would have in a "this." Accordingly, the singular judgment has its proximate truth in the *particular judgment*.

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b. The particular judgment

The non-singularity of the subject that must be posited in the first judgment of reflection instead of the subject's singularity is *particularity*. But particularity is determined in the judgment of reflection as *essential singularity*; particularity cannot be, therefore, a *simple, abstract* determination in which the singular would be sublated and the concrete existent dissolved, but is rather only an extension of this singular in external reflection. Thus the subject is: "these ones," or "a particular number of singulars."

[64] "phenomenal something" = *Erscheinende*. [65] *"Nicht ein Dieses" ist ein Allgemeines der Reflexion*.

The judgment, "some singulars are a universal of reflection," appears at first to be a positive judgment, but it is just as well also negative; for "some" contains universality and may, accordingly, be regarded as *comprehensive*; but since it is particularity, it is equally disproportionate with respect to universality. The *negative* determination which the subject has obtained through the transition of the singular judgment also is, as we have shown above, the determination of the connection, the copula.[66] – Implicated in the judgment, "some humans are happy," is *the immediate consequence*: "*some* humans are *not* happy." When *some* things are useful, then, precisely for that reason, there also are *some* that are *not* useful. The positive and the negative judgment no longer fall outside one another, but the particular immediately contains both at the same time, precisely because it is a judgment of reflection. – But the particular judgment is therefore *indeterminate*.

If, in the example of such a judgment, we consider further the subject, "some humans," "some animals," etc., we find that it contains, besides the particular form determination of "some," also the content determination of "humans," etc. By the subject of the singular judgment one could mean, "this human," a singularity that properly pertains to external pointing; it would best be expressed, therefore, by something like "Gaius." But the subject of the particular judgment can no longer be "some Gaiuses," for Gaius is supposed to be a singular as singular. To the "some," therefore, there is added a more universal content, say "humans," "animals," etc. This is not a mere empirical content, but one which is determined by the form of the judgment; it is *universal*, that is, because "some" contains universality, and the latter must at the same time be separated from the singulars which the reflected singularity has as a basis. More precisely, this universality is also the *universal nature* or *species* "human," "animal" – the universality which is the result of the judgment of reflection, but *anticipated*; just as **12.74** the positive judgment, since it has *the singular* for subject, also anticipates the determination which is the result of the judgment of existence.

Thus the subject that contains the singulars, their connection to particularity, and the universal nature, is already posited as the totality of the determinations of the concept. But, to be precise, this consideration is an external one. What is at first already posited in the subject by virtue of its form, in reciprocal *connection*, is the *extension* of the "this" to particularity; but this generalization is not commensurate to the "this"; the latter is perfectly determinate, but "some" is indeterminate. The extension ought to

[66] i.e. in section a. immediately preceding: "But a 'this' is *not* an essential universal."

be appropriate to the "this" and therefore, in conformity with it, it ought to be *completely determined*; such an extension is totality, or, in the first instance, *universality* in general.

This universality has the "this" for its basis, for the singular is here the singular reflected into itself; its further determinations run their course, therefore, *outside* it, and just as for this reason particularity determined itself as a "some," so the universality which the subject has attained is an "allness," and thus the particular judgment has passed over into the *universal*.

c. The universal judgment

The universality of the subject of the universal judgment is the external universality of reflection, "allness"; the "all" is the all of all the *singulars* in which the singular remains unchanged. This universality is therefore only a *commonality* of self-subsisting singulars, an *association* of such singulars as comes about only by way of *comparison*. – This is the association that first comes to mind at a subjective level of *representation* when there is talk of universality. The most obvious reason given for viewing a determination as universal is *because it fits many*. – Also in *analysis* is this conception of universality the one most prevalent, as when, for instance, the development of a function in a *polynomial* is taken to have greater *universal* value than its development in a *binomial*, because the *polynomial* displays *more single terms* than the *binomial*. The demand that the function should be resolved in its full universality would require, strictly speaking, a *pantonomial*, the exhausted infinity. But here is where the limitation of that demand becomes apparent, and where the display of the *infinite* number of terms must rest satisfied with the *ought* it commands, and therefore also with a *polynomial*. But in fact the binomial is already the pantonomial in those cases where
12.75 the *method* or the *rule* concerns only the dependence of one member on another, and the dependence of several terms on those that precede them does not particularize itself but remains one and the same underlying function. It is the *method* or the *rule* which is to be regarded as the true *universal*; in the progress of the development or in the development of a polynomial, the rule is only *repeated*, so that it gains nothing in universality through the increased number of terms. We have already spoken earlier of the bad infinity and its deception;[67] the universality of the concept is the *achieved beyond*, whereas that bad infinity remains afflicted with a beyond which is unattainable but remains a mere *progression* to infinity. If it is *allness*

[67] Cf. GW 11, 79–81; above 21.127ff.

that universality brings to mind, a universality that ought to be exhausted in singulars as singulars, then there has been a relapse into that bad infinity; or else it is mere *plurality* which is taken for allness. But plurality, however great it might be, remains inescapably only particularity: it is not allness. – Yet there is in all this an obscure intimation of the universality of the *concept* as it exists in and for itself; it is the concept that violently strives to reach beyond the stubborn singularity to which pictorial representation clings and beyond the externality of its reflection, passing off allness *as totality* or rather as the category of the in-and-for-itself.

This is apparent in other ways as well in the allness which is above all *empirical* universality. Inasmuch as the singular is presupposed as something immediate and is therefore *pre-given* and externally *picked*, the reflection which collects it into an allness is equally external to it. But because the singular, as a "this," is absolutely indifferent to such a reflection, the universality and the collected singularity cannot combine to form a unity. The empirical allness thus *remains* a *task*; it is an *ought* which, as such, cannot be represented in the form of being. Now an empirically universal proposition – for nevertheless such are advanced – rests on the tacit agreement that, if no *instance* of the contrary can be adduced, a *plurality* of cases ought to count for an *allness*; or that a *subjective* allness, namely the *known* cases, may be taken for an *objective* allness.

Now a closer examination of the *universal* judgment before us shows that the subject, as we have just noted, contains the achieved universality *as presupposed*; it even contains it as *posited* in it. "All humans" expresses, *first*, the *species* "human"; *second*, this species in its singularization, but in such a way that the singulars are at the same time expanded to the universality **12.76**
of the species; conversely, through this conjunction with singularity, the universality is just as perfectly determined as singularity, and the *posited* universality has thereby become *equal* to *what was presupposed*.

But, strictly speaking, we should not anticipate *the presupposed* but should rather consider the result for itself in the form determination. – The singularity, inasmuch as it is expanded to allness, is *posited* as negativity, and this is identical self-reference. It has not remained, therefore, that first singularity (of Gaius, for instance) but is a determination identical with universality, or the absolute determinateness of the universal. – That *first* singularity of the singular judgment was not the *immediate singularity* of the positive judgment, but came about through the dialectical movement of the judgment of existence in general;[68] it was already determined

[68] Cf. above, 12.71.

to be the *negative identity* of the determinations of that judgment. This is the true presupposition in the judgment of reflection; as contrasted to the positing that runs its course in that judgment, that *first* determinateness of singularity was the latter's *in-itself*; consequently, what singularity is *in itself*, through the movement of the judgment of reflection is now *posited* – posited, that is, as the identical self-reference of the determinate. Therefore the *reflection* that expanded the singularity to allness is not external to it; on the contrary, it only makes *explicit* what was before *implicit*. – Hence the result is in truth the *objective universality*. The subject has thus shed the form determination of the judgment of reflection that made its way from the "this" to the "allness" through the "some." Instead of "all humans," we now have to say "the human being."[69]

The universality that has thereby arisen is *the genus*, or the universality which is *concrete* in its universality. The genus does not *inhere* in the subject; it is not *one* property of it or a property at all; it contains all singular determinacies dissolved into its substantial purity. – Because it is thus posited as this negative self-identity, it is for that reason essentially subject, but one that is no longer *subsumed* under its predicate. Consequently the nature of the judgment of reflection is now altogether altered.

This judgment was essentially a judgment of *subsumption*. The predicate was determined, in contrast to its subject, as the *implicit* universal; according to its content, it could be taken as an essentially relational determination or also as a mark – a determination which makes the subject essentially only an *appearance*. But when determined to *objective universality*, the subject ceases to be subsumed under such a relational determination or the collecting grasp of reflection; with respect to this objective universality, a predicate of this sort is rather a particular. The relation of subject and predicate has thus reversed itself, and to this extent the judgment has
12.77 at this point sublated itself.

This sublation of the judgment coincides with what the *determination of the copula* becomes, as we still have to consider;[70] the sublation of the determinations of judgment and their transition into the copula are one and same. – For inasmuch as the subject has raised itself to universality, it has become in this determination equal to the predicate which, as the reflected universality, also contains particularity within itself; subject and predicate are therefore identical, that is, in the copula they have come to coincide. This identity is the genus or the nature of a thing in and for itself. Inasmuch as this identity, therefore, again divides, it is the *inner nature* by

[69] *der Mensch*. [70] Cf. below, 12.89.

virtue of which a subject and predicate are connected to each other. This is a connection of *necessity* wherein the two terms of the judgment are only unessential distinctions. – That *what belongs to all the singulars of a genus belongs to the genus by nature*, is an immediate consequence. It expresses what we have just seen – that the subject, e.g. "all humans," sheds its form determination and "the human being" is what it should say instead. – This combination, implicit and explicit, constitutes the basis of a new judgment – *the judgment of necessity*.

C. THE JUDGMENT OF NECESSITY

The determination to which universality has advanced is, as we have seen, the *universality that exists in and for itself* or *the objective universality* that in the sphere of essence corresponds to *substantiality*. It is distinguished from the latter because it belongs to the *concept* and for this reason is not only the *inner* but also the *posited* necessity of its determinations, or in other words, the *distinction* is immanent to it, whereas substance has its distinction only in its accidents, does not have it as a principle within it.

In the judgment now, this objective universality is *posited – first*, posited with this determinateness as essential to it, immanent to it; *second*, posited with it as diverse from it, a *particularity* for which the said universality constitutes the substantial basis. In this way the universality is determined as *genus* and *species*.

a. The categorical judgment

The *genus* essentially *divides* or repels itself into *species*; it is genus only in so far as it comprehends the species under it; the species is a species only in so far as, on the one side, it exists in singulars, and, on the other **12.78**
side, it possesses in the genus a higher universality. – Now the *categorical judgment* has for predicate such a universality as in it the subject possesses its *immanent nature*. But the categorical judgment is itself the first or the *immediate* judgment of necessity; consequently, the determinateness of the subject, by virtue of which the latter is a singular as contrasted to the genus or the species, belongs to the immediacy of external concrete existence. – But objective universality also has here only its first *immediate* particularization; on the one hand, therefore, it is itself a determinate genus with respect to which there are higher genera; on the other hand, it is not the most *proximate* genus, that is, its determinateness is not directly the principle of the specific particularity of the subject. But what is *necessary* in

it is the *substantial identity* of subject and predicate, in view of which the distinguishing mark of each is only an unessential positedness or even only a name; in its predicate, the subject is reflected into its being-in-and-for-itself. Such a predicate ought not to be classed with the predicates of the preceding judgments. For example, to throw together into one class these judgments:

The rose is red,
The rose is a plant,
or This ring is yellow,
It is gold,

and thus to take such an external property as the color of a flower as a predicate equal to its vegetable nature, is to overlook a difference which the dullest mind would not miss. – The categorical judgment, therefore, is definitely to be distinguished from the positive and the negative judgment; in these, what is said of the subject is a *singular accidental* content; in the former, the content is the totality of the form reflected into itself. In this content, therefore, the copula has the meaning of *necessity*, whereas in that of the other two it has only the meaning of abstract, immediate *being*.

The *determinateness* of the subject, which makes it a *particular* with respect to the predicate, is at first still something *contingent*; subject and predicate are not connected with *necessity* by the *form* or the *determinateness*; the necessity is therefore still an *inner* one. – The subject is subject, however, only as a *particular*, and to the extent that it possesses objective universality, it has to possess it essentially in accordance with that at first immediate determinateness. The objective universal, in *determining* itself, that is, in positing itself in a judgment, is in a connection of identity with this repelled *determinateness* as such – essentially, that is, this determinateness is not to be posited as merely accidental. Only through this *necessity* of its immediate being does the categorical judgment conform to its objective universality
12.79 and, in this way, has passed over into the *hypothetical judgment*.

b. The hypothetical judgment

"*If A is, then B is*"; or "*The being of A is not its own being but the being of an other, of B.*" – What is posited in this judgment is the *necessary connectedness* of immediate determinacies, a connectedness which in the categorical judgment is not yet posited. – There are here *two* immediate, or externally contingent concrete existences, of which in the categorical judgment there is at first only one, the subject; but since one is external

to the other, this other is immediately also external with respect to the first. – On account of this immediacy, the *content*s of both sides are still indifferent to each other; at first, therefore, this judgment is a proposition of empty form. Now, *first*, the immediacy is as such indeed self-subsistent, a concrete being; but, *second*, what is essential is its connection; this being is therefore just as much mere *possibility*; the hypothetical judgment does not say either that A *is*, or that B *is*, but only that *if* the one is, then the other is; only the connectedness of the extremes is posited as existing, not the extremes themselves. Indeed, each extreme is posited in this necessity as equally the *being of an other*. – The principle of identity asserts that A is only A, not B; and B is only B, not A. In the hypothetical judgment, on the contrary, the being of finite things is posited through the concept in accordance with their formal truth, namely that the finite is its own being, but equally is not its own being but is the being of an other. In the sphere of being, the finite *alters* and comes to be an other. In the sphere of essence, it is *appearance*; its being is posited to consist in the *reflective shining* of an other in it, and the *necessity* is the *inner* connection not yet posited as such. But the concept is this: that this identity is *posited*; that the existent is not abstract self-identity but *concrete self-identity* and is, immediately within it, the being of an other.

The hypothetical judgment can be more closely determined in terms of the relations of reflection as a relation of *ground* and *consequence*, *condition* and *conditioned*, causality etc. Just as substantiality is present in the categorical judgment in the form of its concept, so is the connectedness of causality in the hypothetical judgment. This and the other relations all recur in it, but they are there essentially only as moments of one and the same identity. – However, in it they are as yet not opposed as singular or particular and universal according to the determinations of the concept, but are only as *moments in general* at first. The hypothetical judgment, therefore, has a shape which is more that of a proposition; just as the **12.80**
particular judgment is of indeterminate content, so is the hypothetical of indeterminate form, for the determination of its content does not conform to the relation of subject and predicate. – Yet the being, since it is the being of the other, is for that very reason *in itself* the *unity of itself and the other*, and therefore *universality*; by the same token it is in fact only a *particular*, for it is a determinate being and does not refer in its determinateness merely to itself. But it is not the *simple*, abstract particularity that is posited; on the contrary, through the *immediacy* which the *determinacies possess*, the moments of particularity are differentiated; at the same time, through the unity of these moments as constituted by their connection,

the particularity is also their totality. – In truth, therefore, what is posited in this judgment is universality as the concrete identity of the concept whose determinations do not have any subsistence of their own but are only particularities posited in that identity. So it is the *disjunctive judgment*.

c. The disjunctive judgment

In the categorical judgment, the concept is objective universality and an external singularity. In the hypothetical, the concept manifests its presence in this externality, in its negative identity. Through this identity, the objective universality and the external singularity obtain the determinateness, now posited in the disjunctive judgment, which in the hypothetical they possess immediately. Hence the disjunctive judgment is objective universality at the same time posited in union with the form. It thus contains, *first*, the concrete universality or the genus in simple form, as the subject; *second*, *the same universality* but as the totality of its differentiated determinations. "A is either B or C." This is the *necessity of the concept* in which, *first*, the self-identity of the two extremes is of the same extent, content, and universality. *Second*, they are differentiated according to the form of conceptual determination, but, because of that identity, this determination *is a mere form*. *Third*, the identical objective universality appears for that reason reflected into itself as against the non-essential form, as a *content* which however has the determinateness of form in it – once as the simple determination of *genus*; then again, as this determinateness developed in its difference, and in this way it is the particularity of the *species* and their *totality*, *the universality of the genus*. – The particularity constitutes in its development the *predicate*, because, in containing the whole universal sphere of the subject, and in containing it, however, also in the articulation of particularity, it is to that extent the *greater universal*.

Upon closer consideration of this particularization, it is the genus that constitutes *first of all* the substantial universality of the species; the subject
12.81 is thus B *as well as* C; this "as well as" indicates the *positive* identity of the particular with the universal; this objective universal maintains itself fully in its particularity. *Secondly*, the species *mutually exclude one another*; "A is *either* B *or* C"; for they are the *specific difference* of the universal sphere. This "either or" is their *negative* connection. In this negative connection they are just as identical as in the positive; the genus is their *unity* as a unity of *determinate* particulars. – If the genus were an abstract universality, as in the judgments of existence, then the species would also have to be taken as *diverse* and mutually indifferent; this universality, however, is

not the external one that arises only through *comparison* and *abstraction* but is, on the contrary, the universality which is immanent to the genus and concrete. – An empirical disjunctive judgment is without necessity; A is either B or C or D, etc., because the species B, C, D, etc., are *found beforehand*; strictly speaking, therefore, there is no question here of an "either or," for the completeness of these species is only a subjective one; of course, *one* species excludes the *other*, but the "either or" excludes *every other* species and excludes within itself an entire sphere. This totality has its *necessity* in the negative unity of the objective universal which has dissolved singularity within itself and possesses, immanent in it, the simple *principle* of differentiation by which the species are *determined* and connected. The empirical species, on the contrary, have their differences in some accidentality or other which is a principle external to them and is not, therefore, *their* principle, and consequently also not the immanent determinateness of the genus; for this reason, they are also not reciprocally connected according to their determinateness. – Yet it is by virtue of their determinateness that the species constitute the universality of the predicate. – Here is where the so-called *contrary* and *contradictory* concepts should find their proper place, for the disjunctive judgment is where the essential difference of the concept is posited; but here they also equally find their truth, namely that contrariness and contradictoriness are themselves differentiated both as contraries and as contradictory. Species are contrary inasmuch as they are merely *diverse*, that is to say, inasmuch as they possess an immediate existence as subsisting in and for themselves by virtue of the genus which is their nature. They are *contradictory*, inasmuch as they exclude one another. But each of these determinations is by itself one-sided and void of truth. In the "either or" of the disjunctive judgment, their unity is posited as their truth, which is that the independent subsistence of the species as *concrete universality* is itself also the *principle* of the negative unity by which they mutually exclude one another.

Through the identity just demonstrated of subject and predicate in accordance with the negative unity, the genus is determined in the dis- **12.82**
junctive judgment as the *proximate genus*. This expression indicates at first the mere quantitative difference of the *more* or *less* determinations which a universal contains as contrasted to a particularity coming under it. On this account, which is the truly proximate genus remains contingent. But then, if the genus is taken as a universal arrived at by the mere abstraction of determinations, it cannot strictly speaking form a disjunctive judgment; for it is contingent whether, as it were, there is still left in it the determinateness that constitutes the principle of the "either or"; the genus would

not be displayed in the species according to its *determinateness*, and these would only be capable of contingent completeness. In the categorical judgment, the genus stands at first over against the subject only in this abstract form – is not, therefore, necessarily its proximate genus and, to this extent, is external to it. But when the genus is a concrete, essentially *determined* universality, then, as simple determinateness, it is the unity of the *moments of the concept* – moments that, only sublated in that simplicity, have their real difference in the species. Hence the genus is the *proximate* genus of a species, for the latter possesses its specific difference in the essential determinateness of the genus, and the species have as such the determination differentiating them in the nature of the genus.

What we have just considered constitutes the identity of subject and predicate from the aspect of *determinateness* in general. This is an aspect that was posited by the hypothetical judgment, the necessity of which is an identity of immediate and diverse things and is, therefore, essentially a negative unity. It is this negative unity that in principle separates subject and predicate but is now posited as itself differentiated – in the subject, as *simple* determinateness; in the predicate, as *totality*. That parting of subject and predicate is the *difference of the concept*; the *totality* of the *species* in the predicate can then be *none other* than this difference. – The reciprocal *determination of the disjunctive* terms is therefore hereby given. It reduces to the difference of the concept, for it is the concept alone that disjoins itself and manifests in its determination its negative unity. Of course, the species comes up for consideration here only under the aspect of its simple conceptual determinateness, not according to the *shape* in which, proceeding from the idea, it steps into a further self-subsistent *reality*. This reality is of course *dropped* in the simple principle of the genus; but the *essential* differentiation must be a moment of the concept. In the judgment here considered, it is really now the concept's *own* progressive determination that itself *posits* its disjunction, just as was the case for the concept itself, as we saw when it was determined in and for itself and was differentiated into determinate concepts.[71] – Now because the concept is
12.83 the universal, the positive as well as the negative totality of the particulars, for that reason it is immediately itself also *one of its disjunctive members*; the *other* member, however, is this universality resolved into *its particularity*, or the determinateness of the concept *as determinateness*, in which the very universality displays itself as totality. – If the disjunction of a genus into species has not yet attained this form, this is proof that the disjunction has

[71] Cf. above, 12.38–39.

not risen to the determinateness of the concept and has not proceeded from it. – *Color* is either violet, indigo, blue, green, yellow, orange, or red; even empirically, the confusion and impurity of such a disjunction are at once apparent; it is a barbarism even from this standpoint. If color is conceived as the *concrete unity* of light and darkness, then this *genus* has within it the *determinateness* that constitutes the *principle* of its particularization into species. Of these, however, one must be the utterly simple color that holds the opposition in balance, contained and negated in the color's intensity; the relation of the opposition of light and darkness must then take its place over against it, and, since this relation is a natural phenomenon, the indifferent neutrality of the opposition must be further added to it. – Taking for genus such mixtures as violet, and orange, or shades of difference like indigo blue and light blue, betrays a totally inconsiderate procedure that shows too little reflection even for empiricism.[72] – But this is not the place to discuss the different and more finely determined forms that disjunction may indeed assume in the element of nature or spirit.

In the first instance, the disjunctive judgment has the members of the disjunction in the predicate. But the judgment is itself equally disjoined; its subject and predicate are the members of the disjunction; they are the moments of the concept posited in their determinateness but at the same time as identical – *identical*, (α) in the objective universality which is in the subject as the simple *genus*, and in the predicate as the universal sphere and totality of the moments of the concept; and (β) in the *negative* unity, the developed connectedness of necessity, in accordance with which the *simple determinateness* in the subject has fallen apart into the *difference of the species* and these, in this very difference, have their essential connection and self-identity.

This unity, the copula of this judgment in which the extremes have come together through their identity, is thus the concept itself, indeed the concept *as posited*; the mere judgment of necessity has thereby risen to the *judgment of the concept*. **12.84**

D. THE JUDGMENT OF THE CONCEPT

To know how to form *judgments of existence*, such as "the rose is red," "the snow is white," etc., hardly counts as a sign of great power of judgment. The *judgments of reflection* are more in the nature of *propositions*; to be sure,

[72] The criticism is directed at Goethe's theory of colors. See Goethe, *Zur Farbenlehre: Didaktischer Teil in Goethes Werke*, Vol. 13 (Hamburg: Christian Wegner, 1966), §175.

in the judgment of necessity the subject matter is present in its objective universality, but it is only in the judgment now to be considered that *its connection with the concept is to be found*. The concept is at the basis of this judgment, and it is there with reference to the subject matter, as an *ought* to which reality may or may not conform. – This is the judgment, therefore, that first contains true adjudication; the predicates, "good," "bad," "true," "right," etc., express that the fact is *measured* against the concept as an *ought* which is simply presupposed, and is, or is not, in *agreement* with it.

The judgment of the concept has been called the judgment of *modality*, and has been regarded as containing the form of the connection of subject and predicate as this obtains in an *external understanding*, and as concerned with the value of the copula only *in connection with thought*.[73] Accordingly, judgment is said to be *problematic* when the affirmation or negation is taken as *optional* or *possible*; *assertoric*, when it is taken as *true*, that is, *actual*, and *apodictic* when it is taken as *necessary*. – It is easy to see why it would be an easy step in this judgment to go outside the judgment itself and to regard its determination as something merely *subjective*. For it is the concept here, the subjective, that comes into play again in judgment and relates to an immediate actuality. But this subjectivity is not to be confused with *external reflection*, which is of course also something subjective but in a different sense than the concept itself; on the contrary, the concept that has again emerged out of the disjunctive judgment is the very opposite of a mere *mode* or *manner*. The earlier judgments are subjective in this sense, for they rest on an abstract one-sidedness in which the concept is lost. But the judgment of the concept is instead objective and, as contrasted with the others, it is the truth, for it rests on the concept precisely in its determinateness as concept, not in some external reflection or with *reference to* some subjective, that is, accidental, *thought*.

In the disjunctive judgment, the concept was posited as the identity of universal nature and its particularization, and with that the relation of the judgment was sublated. This *concretion* of universality and particularization is at first a simple result; it must now further develop itself into totality,
12.85 for its moments have at first collapsed into it and do not as yet stand over against each other in determinate self-subsistence. – The shortcoming of that result may also be stated more incisively by saying that although in the disjunctive judgment the objective *universality* has attained completion in *its particularization*, the negative unity of the latter has only retreated *into it* and has not as yet determined itself as the third moment, that of

[73] Cf. A74/B99ff.

singularity. – But to the extent that the result is itself *negative unity*, it is already this *singularity*; it is then this one determinateness alone that must now *posit* its negativity, that must part itself into *extremes* and in this way concludes its development in the *syllogistic conclusion*.[74]

The proximate diremption of this unity is the judgment in which the unity is posited first as subject, as an *immediate singular*, and then as predicate, as the determinate connection of its moments.

a. The assertoric judgment

The judgment of the concept is at first *immediate*; as such, it is the *assertoric* judgment. The subject is a concrete singular in general, and the predicate expresses this same singular as the *connection* of its *actuality*, its determinateness or *constitution*, to its *concept*. ("This house is *bad*," "this action is *good*.") More closely considered, it contains, therefore, (a) that the subject *ought* to be something; its *universal nature* has posited itself as the self-subsistent concept; (b) that *particularity* is *something constituted* or an *external concrete existence*, not only because of its immediacy, but because it expressly differs from its self-subsisting universal nature; its external concrete existence, for its part, because of this self-subsistence of the concept, is also indifferent with respect to the universal and may or may not conform to it. – This constitution is the *singularity* which in the disjunctive judgment escapes the necessary *determination* of the universal, a determination that exists only as the particularization of the *species* and as the negative *principle* of the genus. Thus the concrete universality that has come out of the disjunctive judgment divides in the assertoric judgment into the form of *extremes* to which the concept itself, as the *posited* unity connecting them, is still lacking.

For this reason the judgment is so far only *assertoric*; its *credential* is only a subjective *assurance*. That something is good or bad, right, suitable or not, hangs on an external third. But to say that the connectedness is thus *externally posited* is the same as saying that it is still only *in itself* or *internal*. – When we say that something is good or bad, etc., we certainly do not mean to say that it is good only *in a subjective consciousness* but may perhaps **12.86** be bad in itself, or that "good and bad," "right," "suitable," etc. may not be predicates of the object itself. The merely subjective character of the assertion of this judgment consists, therefore, in the fact that the *implicitly* present connectedness of subject and predicate has not been *posited* yet, or,

[74] There is in German a play on words here. *Schluß* means both "conclusion" and "syllogism."

what amounts to the same thing, that it is only *external*; the copula still is an immediate *abstract being*.

Thus the assurance of the assertoric judgment can with right be confronted by an opposing one. When the assurance is given that "this action is good," the opposite, "this action is bad," has equal justification. – Or, considering the judgment *in itself*, since its subject is an *immediate singular*, in this abstraction it still does not have, posited *in it*, the *determinateness* that would contain its connection with the universal concept; it still is a contingent matter, therefore, whether there is or there is not conformity to the concept. Essentially, therefore, the judgment is *problematic*.

b. The problematic judgment

The *problematic* judgment is the assertoric judgment in so far as the latter must be taken positively as well as negatively. – According to this qualitative side, the *particular* judgment is likewise a problematic one, for it has positive just as much as negative value (equally problematic is also the being of the subject and predicate in the *hypothetical* judgment), and also posited through this side is that the singular judgment and the categorical are still something merely subjective. In the problematic judgment as such, however, this positing is more immanent than it is in these others, for in it the *content of the predicate is the connection of the subject to the concept* – here, therefore, the *determination of the immediate as something contingent* is itself *present*.

Whether the predicate ought to be or not to be coupled with a certain subject appears at first only as problematic, and to this extent the indeterminateness falls on the side of the copula. The *predicate* has no determination to gain from this coupling, since it is already the objective, concrete universality. The problematic element falls, therefore, on the immediacy of the *subject*, which is thereby determined as a *contingency*. – But further, we must not for that reason abstract from the singularity of the subject; purified of such a singularity, the subject would be only a universal, whereas the predicate entails precisely this, that the concept of the subject ought to be posited with reference to its singularity. – We may not say, "the house or a house is good," but, "so indeed it is in the way it is made." – The problematic element in the subject itself constitutes its
12.87 *moment of contingency*, the *subjectivity of the fact it expresses* as contrasted with its objective nature or its concept, its mere *mode and manner* or its *constitution*.

Consequently the *subject* is itself differentiated into its universality or objective nature, that is, its *ought*, and the particularized constitution of immediate existence. It thereby contains the *ground* for *being or not being what it ought to be*. In this way, it is equated with the predicate. – Accordingly, the *negativity* of the problematic character of the judgment, inasmuch as it implicates the immediacy of the *subject*, only amounts to this original partition of the latter *into its moments of universal and particular* of which it is already the unity – a partition which is the judgment itself.

One more comment that can be made is that *both* sides of the subject, its concept and the way it is constituted, could each be called its *subjectivity*. The concept is the universal essence of a fact, withdrawn into itself, the fact's negative self-unity; this unity constitutes the fact's subjectivity. But a fact is also essentially *contingent* and has an *external constitution*; this last may also be called its mere subjectivity, as contrasted with the objectivity of the concept. The fact consists just in this, that its concept, as self-negating unity, negates its universality and projects itself into the externality of singularity. – As this duplicity, the *subject* of the judgment is here posited; the truth of those two opposite meanings of subjectivity is that they are in one. – The meaning of subjective has itself become problematic by *having lost* the immediate *determinateness* that it had in the immediate judgment and its determinate *opposition* to the *predicate*. – These opposite meanings of subjectivity that surface even in the ratiocination of ordinary reflection should by themselves at least call attention to the fact that subjectivity has no truth *in one* of them alone. The duplicity of meaning is the manifestation of the one-sidedness of each when taken by itself.

When this problematic character of the judgment is thus posited as the character of the *fact*, the fact with its *constitution*, the judgment itself is no longer problematic but *apodictic*.

c. The apodictic judgment

The subject of the apodictic judgment ("the house, as so and so constituted, is *good*," "the action, as so and so *constituted*, *is* right") includes, *first*, the universal, or what it *ought to be*; *second*, its *constitution*; the latter contains the ground why a predicate of the judgment of the concept does or does **12.88**
not pertain to it, that is, whether the subject corresponds to its concept or not. This judgment is now *truly* objective; or it is the *truth* of the *judgment* in general. Subject and predicate correspond to each other, and have the same concept, and this *content* is itself posited *concrete universality*; that is

to say, it contains the two moments, the objective universal or the genus and the *singularized universal*. Here we have, therefore, the universal that is *itself* and continues through *its opposite*, and is a universal only in *unity* with the latter. – Such a universal, like "good," "fitting," "right," etc., has an *ought* for its ground, and contains at the same time the correspondence of *existence*; it is not the ought or the genus by itself, but this *correspondence* which is the *universality* that constitutes the predicate of the apodictic judgment.

The *subject* likewise contains these two moments in *immediate* unity as *fact*. The truth of the latter, however, is that it is internally *fractured* into its *ought* and its *being*; *this is* the *absolute judgment on all actuality*.[75] – That this original partition, which is the omnipotence of the concept, is equally a turning back into the concept's unity and the absolute connection of "ought" and "being" to each other, is what makes the actual into *a fact*; the fact's inner connection, this concrete identity, constitutes its *soul*.

The transition from the immediate simplicity of the fact to the *correspondence* which is the *determinate* connection of its ought and its being – the copula – now shows itself upon closer examination to lie in the particular *determinateness* of the fact. The genus is the universal *existing in and for itself* which, to that extent, appears as unconnected; the determinateness, however, is that which in that universality is reflected *into itself* but at the same time *into an other*. The judgment, therefore, has its *ground* in the constitution of the subject and is thereby *apodictic*. Consequently, we now have the *determinate* and *accomplished* copula which hitherto consisted in the abstract "is" but has now further developed into *ground* in general. It first attaches to the subject as *immediate* determinateness, but it is equally the *connection* to the predicate – a predicate that has no other *content* than this *correspondence* itself, or the connection of the subject to the universality.

Thus the form of judgment has passed away, first, because subject and predicate are *in themselves* the same content; but, second, because through its determinateness the subject points beyond itself and connects itself to the predicate; but again, third, *this connecting* has equally passed over into the predicate, only constitutes the content of it, and so it is the connecting
12.89 as *posited* or the judgment itself. – The concrete identity of the concept that was the *result* of the disjunctive judgment and constitutes the *inner* foundation of the judgment of the concept – the identity that was posited at first only in the predicate – is thus recovered *in the whole*.

[75] Like the Greek κρίσις (cf. crisis), the German *Urteil* (judgment) connotes "partition."

On closer examination, the positive factor in this result which is responsible for the transition of the judgment into another form is that, as we have just seen,[76] the subject and predicate are in the apodictic judgment each the whole concept. – The *unity* of the concept, as the *determinateness* constituting the copula that connects them, is at the same time *distinct* from them. At first, it stands only on the other side of the subject as the latter's *immediate constitution*. But since its essence is *to connect*, it is not only that immediate constitution but the *universal* that *runs through* the subject and predicate. – While subject and predicate have the same *content*, it is the *form of their connection* that is instead posited through the determinateness of the copula, *the determinateness as a universal* or *the particularity*. – Thus it contains in itself both the form determinations of the extremes and is the *determinate* connection of the subject and predicate: the *accomplished* copula of the judgment, the copula *replete of content*, the unity of the concept that re-emerges from the judgment wherein it was lost in the extremes. – *By virtue of this repletion of the copula*, the judgment has become *syllogism*.

[76] In the preceding section 12.88.

CHAPTER 3

The syllogism

12.90

The *syllogism* is the result of the restoration of the *concept in the judgment*, and consequently the unity and the truth of the two. The concept as such holds its moments sublated in this *unity*; in judgment, the unity is an internal or, what amounts to the same, an external one, and although the moments are connected, they are posited as *self-subsisting extremes*. In the *syllogism*, the determinations of the concept are like the extremes of the judgment, and at the same time their determinate *unity* is posited.

Thus the syllogism is the completely posited concept; it is, therefore, the *rational*. – The understanding is taken to be the faculty of the *determinate* concept which is held fixed *for itself* by virtue of abstraction and the form of universality. But in reason the *determinate* concepts are posited in their *totality* and *unity*. Therefore, it is not just that the syllogism is rational but that *everything rational is a syllogism*. Syllogistic inference has long since been ascribed to reason; but, on the other hand, reason in and for itself, and rational principles and laws, are so spoken of that no light is thrown on why the one reason that syllogizes, and the other which is the source of laws and otherwise eternal truths and absolute thoughts, hang together. If the former is supposed to be only a formal reason while the latter is supposed to be the one that generates content, then one would expect on this distinction that precisely the *form* of reason, the inference, would not be missing in the latter. And yet, the two are commonly held so far apart, the one without mention of the other, that it seems as though the reason of absolute thoughts were ashamed, so to speak, of inferential reason, and the syllogism were listed as also an activity of reason merely as matter of tradition. But surely, as we have just remarked, logical reason must be essentially recognizable, when regarded as *formal*, also in the reason that is concerned with a content; indeed, no content can be rational except by virtue of the rational form. In this matter we cannot rely on what is commonly said about reason, for common views fail to tell us what we are to understand by *reason*; this would-be rational wisdom is so busy with its

objects that it forgets to pay attention to reason itself but only identifies it **12.91**
by characterizing it through the objects that it is said to have. If reason is supposed to be a cognition that would know about God, freedom, right and duty, the infinite, the unconditional, the suprasensible, or even gives only representations and feelings of such objects, then for one thing these objects are only negative, and for another the original question still stands, what is there in all these objects that makes them rational? – The answer is that the infinitude in them is not the empty abstraction from the finite, is not a universality which is void of content and determination, but is the fulfilled universality, the concept which is *determined* and is truly in possession of its determinateness, namely, in that it differentiates itself internally and is the unity of its thus intelligible and determined differences. Only in this way does reason *rise* above the finite, the conditioned, the sensuous, or however one might define it, and is in this negativity essentially *replete with content*, for as unity it is the unity of determinate extremes. And so *the rational* is nothing but the *syllogism*.

Now the syllogism, like judgment, is at first *immediate*; as such, its determinations (*termini*) are *simple*, *abstract* determinacies; it is then *the syllogism of the understanding*. If one stays at this configuration of the syllogism, then its rationality, though present there and posited, is not apparent. The essential element of the syllogism is the *unity* of the extremes, the *middle term* that unites them and the *ground* that supports them. Abstraction, by holding fast to the *self-subsistence* of the extremes, posits this *unity* opposite them, as a determinateness with just as fixed an *existence of its own*, thus grasping it more as a *non-unity* than as a unity. The expression, "middle term" (*medius terminus*), is derived from spatial representation, and has its share of responsibility for why we stop short at the *externality* of the terms. Now if the syllogism consists in the *positing* in it of the *unity of the extremes*, but if this unity is simply taken on the one hand as a particular by itself, and on the other hand as only an external connection, and *non-unity* is made the essential relation of syllogism, then the reason of the syllogism is of no help to rationality.

First, the *syllogism of existence*, in which the terms are thus immediately and abstractly determined, demonstrates internally that, since like judgment it is the *connection* of those terms, these are not in fact abstract but each contains in it the *reference connecting it to the others*, and the determination of the middle term is not just a determinateness opposed to the determinations of the extremes but contains these extremes *posited* in it. **12.92**

Through this dialectic, the syllogism of existence becomes *the syllogism of reflection*, the *second* syllogism. Its terms are such that in each the *other*

shines essentially *reflected in it*, or are posited as *mediated*, as they are indeed supposed to be in accordance with the nature of syllogistic inference in general.

Third, inasmuch as this *reflective shining* or this mediatedness is reflected into itself, syllogism is determined as the *syllogism of necessity*, one in which the mediating factor is the objective nature of the fact. As this syllogism determines the extremes of the concept also as totalities, it has attained the correspondence of its concept (or the middle term) and its existence (or the difference of the extremes). It has attained its truth – and with that it has stepped forth out of subjectivity into *objectivity*.

A. THE SYLLOGISM OF EXISTENCE

1. The syllogism in its *immediate* form has for its moments the determinations of the concept as *immediate*. Accordingly, these are the abstract determinacies of form, such as have not yet been developed by mediation into *concretion* but are only *singular* determinacies. The first *syllogism* is thus the one which is strictly *formal*. The *formalism* of syllogistic inference consists in stopping short at the form of this first syllogism. The concept, when partitioned into its abstract moments, has *singularity* and *universality* for its extremes, and itself appears as the *particularity* that stands between them. Because of their immediacy, these determinacies only refer to themselves, one and all a *single content*. Particularity constitutes at first the middle term by uniting within itself, *immediately*, the two moments of singularity and universality. Because of its determinateness, on the one hand it is subsumed under the universal; on the other hand, the singular with respect to which it possesses universality is subsumed under it. This *concretion* is at first, however, only *a double-sidedness*; the middle term, because of the immediacy that affects it in the immediate syllogism, is a *simple* determinateness, and the *mediation* which it constitutes is *not as yet posited*. Now the dialectical movement of the syllogism of existence consists in positing the moments
12.93 of the mediation that alone constitutes the syllogism.

a. First figure of the syllogism

S-P-U is the general schema of the determinate syllogism. Singularity connects with[77] universality through particularity; the singular is not universal immediately but by means of particularity; and conversely, universality is

[77] *schliesst . . . zusammen*: note the *schliessen* which is connected with *Schluss*, "syllogism," "conclusion," "inference." There is a constant play on words in this section which is difficult to render in English without departing from the text too far.

likewise not singular immediately but lowers itself to it through particularity. – These determinations stand over against each other as *extremes* and are one in a third term which is *diverse* from them. The two are both determinateness; in this they are *identical*; this, their universal determinateness, is *particularity*. But they are no less *extremes* with respect to this particularity than they are to each other, for each is in its *immediate* determinateness.

The general meaning of this syllogism is that the singular, which as such is infinite self-reference and consequently would be only an *inwardness*, emerges through the medium of particularity into *existence*, into a universality wherein it no longer belongs just to itself but stands in *external conjunction*; conversely, since in its determinateness the singular sets itself apart as particularity, in this separation it is a concreted term and, because of the self-reference of the determinateness, it is a self-referring *universal*, and consequently also a true singular; in the extreme of universality the singular has gone from externality *into itself*. – The objective significance of the syllogism is in this first figure only *superficially* present at first, for the determinations are not as yet posited in it as the unity which constitutes the essence of the syllogistic inference. The syllogism is still something subjective inasmuch as the abstract meaning which its terms have has no being in and for itself but is rather only in a subjective consciousness, and is thus isolated. – Moreover, as we have seen,[78] the relation of singularity, particularity, and universality is the *necessary and essential form-relation* of the determinations of the syllogism; the deficiency does not rest in the determinateness of the form but in that each single determination is not at the same time *richer under it*. – Aristotle confined himself rather to the mere relation of *inherence* by defining the nature of the syllogism as follows: *When three terms are so related to each other that the one extreme is in the entire middle term, and this middle term is in the entire other extreme, then these two extremes are necessarily united in the conclusion*.[79] What is here expressed is the repetition of the *equal relation* of inherence of the one extreme to the middle term, and then again of this last to the other extreme, rather than the determinateness of the three terms to each other. – Now since the syllogistic inference rests on this determinateness of the terms to each other, it is immediately apparent that the other relations **12.94** of terms as are given by the other figures can have validity as inferences of the understanding only to the extent that they let themselves be *reduced* to that original relation; these other are not *diverse species* of figures that stand *alongside* the *first* but, on the one hand, to the extent that they are assumed

[78] In section 12.92. [79] *Prior Analytics*, 25b32–35.

to be correct inferences, they rest on the form of syllogistic inference in general; and, on the other hand, to the extent that they deviate from it, they are variant forms into which the first abstract form necessarily passes over and thereby further determines itself and becomes totality. How this occurs, we must now see in greater detail.

S-P-U is thus the general schema of the syllogism in its determinateness. The singular is subsumed under the particular and the particular under the universal; therefore, the singular is also subsumed under the universal. Or the particular inheres in the singular and the universal in the particular; *therefore*, the universal also inheres in the singular. With respect to the side of the universal, the particular is the subject; with respect to that of the singular, it is predicate; or as against the one it is singular, as against the other it is universal. Since both these determinations are united in it, by virtue of this unity of determinations the extremes are joined together. The "therefore" appears as an inference that has taken place in the *subject* and derives from the *subjective* insight into the relation of the two *immediate* premises. Since subjective reflection expresses the two connections of the middle to the extremes as particular and indeed immediate *judgments* or *propositions*, the conclusion as the *mediated* connection is of course also a particular *proposition*, and the "hence" or the "therefore," is the expression that it is the one which is mediated. But this "therefore" is not to be regarded as a determination which is external to this proposition, one that would have its ground and seat in subjective reflection, but as grounded rather in the nature of the extremes themselves whose *connection* is again enunciated as a *mere judgment* or *proposition* only for the sake of, and by virtue of, abstractive reflection, but whose *true connection* is posited as the middle term. – "Therefore S is A": that this is a *judgment* is a merely subjective circumstance; that it is not a merely subjective *judgment*, that is, not a connection drawn through the *mere copula* or the empty "is" but one drawn rather through a determinate middle which is replete with content, *that* is precisely the meaning of the syllogistic inference.

For this reason, to regard the syllogism as merely consisting *of three judgments* is a formalistic view that ignores the relation of the determinations which alone is at issue in the inference. It is altogether a merely subjective reflection that splits the connection of the terms into isolated premises and
12.95 a conclusion distinct from them:

All humans are mortal,
Gaius is a human
Therefore Gaius is mortal.

One is immediately seized by boredom the moment one hears this inference being trotted out, a boredom brought on by the futility of a form that by means of separate propositions gives the illusion of a diversity which is immediately dissolved in the fact itself. It is mostly because of this subjective attire that the inference appears as a subjective *expedient* in which reason or understanding take refuge when they are incapable of *immediate* cognition. – The nature of things, the rational, certainly does not operate in this way, first by drawing up a major premise for itself, the connection of some particularity to a subsistent universal; then by discovering in a second moment the separate connection of a singularity to the particularity, out of which in a third and final moment a new proportion comes to light. – This syllogistic inference from one separate proposition to another is nothing but a subjective form; the nature of the fact is that its various determinations are united in a unity of essence. This rationality is not an expedient; on the contrary, in contrast to the *immediacy* of the connection that still obtains in *judgment*, it is the *objective* element; it is the prior immediacy of cognition that rather is mere subjectivity, in contrast to the syllogistic inference which is the truth of the judgment. – All things are a *syllogism*, a universal united through particularity with singularity; surely not a whole made up of *three propositions*.

2. In the *immediate* syllogism of the understanding, the terms have the form of *immediate determinations*; we must now consider that syllogism from this side, according to which the terms are *content*. We may then regard it as *qualitative*, just as we did the judgment of existence[80] which has the same side of qualitative determination. The terms of this syllogism, just like the terms of that judgment, are accordingly *singular* determinacies, for the determinateness is posited because of its self-reference as indifferent to *form* and hence as content. The *singular* is some immediate concrete subject matter or other; *particularity*, one of its determinacies, properties or relations; *universality*, a yet more abstract, more singularized determinateness in the particular. – Since the subject, as something *immediately* determined, is as yet not posited in its concept, its concretion is not reduced to its essential determinacies; its self-referring determinateness is therefore indeterminate, an infinite *manifoldness*. In this immediacy, the singular has an infinite multitude of determinacies that belong to its particularity **12.96** and any may serve in a syllogism as the middle term for it. Through *each* middle term, however, the singular attaches *to another universal*; through each of its properties it enters into a different arrangement and context of

[80] Cf. above, 12.60.

existence. – Moreover, in comparison with the universal, the middle term is also a concreted term; it itself contains several predicates, and through the same middle term the singular can again attach to several universals. In general, therefore, it is *entirely accidental* and *arbitrary* which of the many properties of a thing is taken for the purpose of connecting it with a predicate; other middle terms are transitions to other predicates, and even the same middle term may by itself be the transition to different predicates, for as a particular against the universal it contains several determinations.

But not only is an indeterminate number of syllogisms equally possible for a subject and not only is any single syllogism *contingent* as regards content, but these syllogisms that concern the same subject must also run into *contradiction*. For difference as such, which is at first an indifferent *diversity*, is in essence equally *opposition*. The concrete is no longer merely phenomenal but is concrete through the unity in the concept of opposites that have determined themselves as moments of the latter. Now inasmuch as in the formal syllogism, in keeping with the qualitative nature of the terms, the concrete is taken according to one of the single determinations that pertain to it, the syllogistic inference assigns to it the predicate corresponding to this middle term; but inasmuch as from another side the opposite determinateness is inferred, the previous conclusion turns out to be false, even though its premises and equally so its consequences are by themselves quite correct. – If from the middle term that a wall was painted blue it is concluded that it is blue, this is a correct inference. But, this conclusion notwithstanding, the wall can be green if it was also covered over with a yellow color, a circumstance from which alone it would follow that the wall is yellow. – If from the senses as middle term it is concluded that the human being is neither good nor bad, for neither the one nor the other can be predicated of the senses, the inference is correct; yet the conclusion is wrong, because to the human being, taken concretely, spirituality also applies as the middle term. – From the middle term of the gravitation of the planets, the satellites and comets towards the sun, it follows correctly that these bodies fall into the sun; but they do not fall into it, because they are equally their own center of gravity or, as it is said, are driven by the centrifugal force. Likewise, from sociability as the middle term, the
12.97 community of goods among citizens can be inferred; however, from individuality as the middle term, if the term is pressed with equal abstractness, there follows the dissolution of the state, as for example it did follow for the German Empire from adhering to that middle term.– It is only fair to hold that nothing is as unsatisfactory as such a formal syllogism, since which middle term is employed is a matter of chance or arbitrariness. No

matter how elegantly a deduction is run through inferences of this kind, however fully its correctness is to be conceded, all this still amounts to nothing, for the possibility is still there that other middle terms may be found from which the opposite can be deduced with equal correctness. – Kant's *antinomies* of reason amount to nothing more than that from a concept one of its determinations is laid down as ground at one time, and another determination at another time, both with equal necessity.[81] – The insufficiency and contingency of an inference must not be blamed in these cases on the content, as if they were independent of the form and the latter alone were the concern of logic. On the contrary, it lies in the form of the formal syllogism that the content is such a one-sided quality; the content is destined to this one-sidedness because of the form's abstractness. It is, namely, one single quality of the many qualities or determinations of a concrete subject matter, or of a concept, because *according to the form* it is not supposed to be anything more than just such an immediate, single determinateness. The extreme of singularity is, as *abstract singularity*, the *immediate* concrete, consequently an infinite or indeterminate manifold; the middle term is the equally *abstract particularity*, consequently a *single one* of these manifold qualities, and likewise the other extreme is the *abstract universal*. It is therefore because of its form that the formal syllogism is totally contingent as regards its content, not indeed because to the syllogism it is accidental whether *this* or *that* subject matter is subject to it (logic abstracts from content), but because, in so far as a subject is laid at its basis, it is contingent which content determinations it will infer from it.

3. The determinations of the syllogism are determinations of content inasmuch as they are immediate and abstract determinations reflected into themselves. But their essence is to be, not immanently reflected and mutually indifferent determinations, but *determinations of form*, and to this extent they are essentially *connections*. These connections are, *first*, those of the extremes to the middle term. These are immediate connections, the *propositiones præmissæ* – namely, the connection of the particular to the universal, the *propositio major*, and that of the singular to the particular, the *propositio minor*. *Second*, there is the connection of the extremes to one **12.98**
another, and this is the *mediated connection*, the *conclusio*. The *immediate* connections, the premises, are propositions or judgments in general, and they *contradict the nature of the syllogism*, for according to the latter the different concept determinations should not be immediately connected but also their unity should be posited; the truth of the judgment is the

[81] For the antinomies, cf. A426/B454ff.

syllogistic conclusion. And there is all the more reason why the premises cannot remain immediate connections as their content is made up of immediately *differentiated* determinations which, as such, are not in and for themselves identical – unless the premises are identical propositions, that is, empty tautologies that lead to nothing.

Accordingly, the normal expectation is that the premises will be *proved*, that is, that *they ought likewise to be exhibited as conclusions*. The two premises, therefore, yield two further syllogisms. But these *two* new syllogisms together yield *four* premises that require *four* new syllogisms; these have *eight* premises whose *eight* conclusions yield in turn *sixteen* conclusions for their *sixteen* premises, and *so on* in a geometrical progression to *infinity*.

Thus we have again *the progress to infinity* that occurred in the lower *sphere of being* but we would not expect now in the domain of the concept, the domain of the absolute reflection from the finite to the self, the region of free infinity and truth. It was shown in the sphere of being[82] that whenever the bad infinity that runs away into a progression raises its head, what we have is the contradiction of a *qualitative being* and of an *impotent ought* that would transcend it; the progression itself is the repeated demand that there be unity that intervenes to confront the qualitative, and the constant fall back into the limitation which is inadequate to the demand. Now in the formal syllogism the *immediate* connection or the qualitative judgment is the basis, and the *mediation* of the syllogism is the higher truth posited over against it. The infinite progression of the proof of the premises does not resolve this contradiction but only perpetually renews it and is the repetition of one and the same original deficiency. – The truth of the infinite progression is rather the sublation of it and of the form which the progression itself has already determined as deficient. – This form is that of the mediation S-P-U. The two connections, S-P and P-U are supposed to be mediated; if this is done in the same manner, only the deficient form S-P-U is replicated, and so on to infinity. With respect to S, P also has the form determination of a *universal*; and with respect to U that of a *singular*, for these connections are as such judgments. As such, they are in need of mediation; but in that form of mediation, only the relation that was
12.99 supposed to be sublated comes up again.

The mediation must therefore occur in some other way. For the mediation of P-U, there is S available; hence the mediation must be given the shape of P-S-U. To mediate S-P, there is U available; accordingly, this mediation becomes S-U-P.

[82] Cf. GW 11.79; above 21.127ff.

If this transition is examined more closely in light of its concept, then, as was shown earlier,[83] the mediation of the formal syllogism is *in the first instance contingent* according to content. The immediate *singular* has in its determinacies an indeterminate number of middle terms, and these have in general equally as many determinacies in turn; it is, therefore, entirely a matter of external *arbitrary choice*, or in general of an *external circumstance* and accidental determination, as to which universal the subject of the syllogism should be annexed. As regards its content, therefore, the mediation is not anything necessary, nor universal; it is not grounded *in the concept of the fact* but the basis of the inference is something external to it, that is, the *immediate*; but of the determinations of the concept, it is the *singular* which is the immediate.

With respect to form, the mediation likewise *presupposes* the *immediacy of connection*; the mediation itself is thus mediated – mediated indeed by means of the *immediate*, that is, *the singular*. – More precisely, the singular has become a mediating term through the *conclusion* of the first syllogism. That conclusion is S-U; the *singular* is thereby posited as a *universal*. In one premise, that is, the minor S-P, it is already as a *particular*; consequently, the singular is that in which these two determinations are united. – Or the conclusion expresses in and for itself the singular as a universal, and it does it, not in any immediate manner, but mediatedly, hence as a necessary connection. The *simple* particularity was the middle term; in the conclusion, this particularity is posited as *developed as the connection of singular and universality*. But the universal is still a qualitative determinateness, the predicate of the *singular*; in being determined as universal, the singular is *posited* as the universality of the extremes or as the middle; it is for itself the extreme of singularity, but since it is now determined as a universal, it is at the same time the unity of the two extremes.

b. The second figure: P-S-U

1. The truth of the first qualitative syllogism is that something is not in and for itself united to a qualitative determinateness which is a universal, but is united to it by means of a contingency or in a singularity. *The subject* **12.100**
of the syllogism has not returned in such a quality to its concept but is conceived only in its *externality*; the immediacy constitutes the basis of the connection and hence the mediation; to this extent, the singular is in truth the middle.

[83] Cf. above, 12.97.

But further, the syllogistic connection is the *sublation* of the immediacy; the conclusion is a connection drawn not immediately but through a third term; therefore, it contains a *negative* unity; therefore, the mediation is now determined as containing a *negative* moment within it.

In this second syllogism, the premises are: P-S and S-U; only the first of these premises is still an immediate one; the second, S-U, is already mediated, namely through the first syllogism; the second syllogism thus presupposes the first just as, conversely, the first presupposes the second. – The two extremes are here determined, the one as against the other, as particular and universal. The latter thus retains its *place*; it is predicate. But the particular has exchanged places; it is subject or is *posited in the determination of the extreme of singularity*, just as the *singular* is posited *with the determination of the middle term* or of particularity. The two no longer are, therefore, the abstract immediacies which they were in the first syllogism. However, they are not yet posited as concrete somethings; in standing in the *place* of the other, each is thereby posited – in its own determination and at the same time, although only *externally* – into that of the *other*.

The *determinate* and *objective* meaning of this syllogism is that the universal is not *in and for itself* a determinate particular (it is rather the totality of its particulars) but that it is *one* of its species *through the mediation of singularity*; the rest of its species are excluded from it by the immediacy of externality. Likewise the particular is not for its part immediately, and in and for itself, the universal; the negative unity is rather what removes the determinateness from it and thereby raises it to universality. – The singularity thus relates to the particular *negatively* in so far as it is supposed to be its predicate; it is *not* the predicate of the particular.

2. But the terms are at first still immediate determinacies; they have not advanced of their own to any objective signification; the positions which two of them have exchanged and now occupy is the form, and this is as yet only external to them. Therefore they are still, as in the first syllogism, each a content indifferent as such to the other – two qualities linked together, not in and for themselves, but through the mediation of an accidental
12.101 singularity.

The syllogism of the first figure was the *immediate* syllogism, or again, the syllogism in so far as its concept is an *abstract form* that has not yet realized itself in all its determinations. The transition of this pure form into another figure is on the one hand the beginning of the realization of the concept, in that the *negative* moment of the mediation, and thereby one further determinateness of the form, is posited in the originally immediate,

qualitative determinateness of the terms. – But, on the other hand, this is at the same time an *alteration* of the pure form of the syllogism; the latter no longer conforms to it fully, and the determinateness posited in its terms is at variance with that original form determination. – In so far as it is regarded as only a subjective syllogism that runs its course in external reflection, we can then take it as a *species* of syllogistic inference that should conform to the genus, namely the general schema S-P-U. But it does not at the moment conform to it; its two premises are P-S or S-P and S-U; the middle term is in both cases the one which is subsumed or is the subject in which the two other terms thus inhere – is not therefore a middle term that in one case would subsume or be predicate, and in the other would be subsumed or be subject, or a middle in which one of the terms would inhere but would itself inhere in the other. – The true meaning of this syllogism's lack of conformity to the general form of the syllogism is that the latter has passed over into it, for its truth consists in being a subjective, contingent conjoining of terms. If the conclusion in this second figure is correct (that is, without recurring to the restriction, to which we shall presently turn, that makes of it something indeterminate), then it is correct because it is so on its own, not because it is the conclusion of this syllogism. But the same is the case for the conclusion of the first figure; it is this, the truth of that first figure, which is posited by the second. – On the view that the second figure is only *one species*, we overlook the necessary transition of the first figure into this second and stop short at the first as the true form. Hence, if in the second figure (which from ancient custom is referred to, without further ground, as *the third*) we are equally supposed to find a *correct* syllogism in this subjective sense, this syllogism would have to be commensurate with the first; consequently, since the one premise S-U has the relation of the subsumption of the middle term under one extreme, then it would have to be possible for the other premise S-P to receive the opposite relation to that which it has, and for P to be subsumed under S. But such a relation would be the sublation of the determinate judgment S is P, and could only occur in an indeterminate judgment, a particular judgment; consequently, the conclusion in this figure can only be particular. But the particular judgment, as we remarked above,[84] is positive as well as negative – a conclusion, therefore, to which no great **12.102** value can be ascribed. – Since the particular and universal are also the extremes, and are immediate determinacies indifferent to each other, their relation itself is indifferent; each can be the major or the minor term,

[84] Cf. above, 12.73.

indifferently the one or the other, and consequently either premise can also be taken as major or minor.

3. Since the conclusion is positive as well as negative, it is a connection which for that reason is indifferent to these determinacies, hence a *universal* connection. More precisely, the mediation of the first syllogism was *implicitly* a contingent one; in the second syllogism, this contingency is *posited*. Consequently, the mediation is self-sublating; it has the determination of singularity and immediacy; what this syllogism joins together must, on the contrary, be *in itself* and *immediately* identical, for that mediating middle, *the immediate singularity*, is an infinitely manifold and external determining. Posited in it, therefore, is rather the self-*external* mediation. The externality of singularity, however, is universality; that mediation by means of the immediate singular points beyond itself to the mediation which is *the other than it*, one which therefore occurs by means of the *universal*. – In other words, what is supposed to be united by means of the second syllogism, must be *immediately* conjoined; the *immediacy* on which it is based does not allow any definite conclusion. The immediacy to which this syllogism points is the opposite of its own: it is the sublated first immediacy of being, therefore the immediacy reflected into itself or the *abstract universal existing in itself*.

From the standpoint of the present consideration, the transition of this syllogism was like the transition of being an *alteration*, for its base is qualitative; it is the immediacy of singularity. But according to the concept, singularity conjoins the particular and the universal by *sublating* the *determinateness* of the particular – and this is what presents itself as the contingency of this syllogistic inference. The extremes are not conjoined by the specific connective which they have in the middle term; this term is *not*, therefore, their *determinate unity*, and the positive unity that yet pertains to it is *abstract universality*. But inasmuch as the middle term is posited in this determination which is its truth, we have another form of the syllogism.

c. The third figure: S-U-P

1. This third syllogism no longer has any single immediate premise; the connection S-U has been mediated by the first syllogism; the connection
12.103 P-U by the second. It thus presupposes both these syllogisms; but conversely it is presupposed by them, just as in general each presupposes the other two. In this third figure, therefore, it is the determination of the syllogism as such that is brought to completion. – This reciprocal mediation means

just this, that each syllogism, although for itself a mediation, does not possess the totality of mediation but is affected by an immediacy whose mediation lies outside it.

Considered in itself, the syllogism S-U-P is the truth of the formal syllogism; it expresses the fact that its mediating middle is the abstract universal and that the extremes are not contained in it according to their essential determinateness but only according to their universality – that precisely *that* is not conjoined in it, which was supposed to be mediated. Posited here, therefore, is that wherein the formalism of the syllogism consists – that its terms have an immediate content which is indifferent towards the form, or, what amounts to the same, that they are such form determinations as have not yet reflected themselves into determinations of content.

2. The middle of this syllogism is indeed the unity of the extremes, but a unity in which abstraction is made from their determinateness, the *indeterminate* universal. But in so far as this universal is at the same time distinguished from the extremes as the abstract from the determinate, it is itself also a *determinate* as against them, and the whole is a syllogism whose relation to its concept needs examining. As the universal, the middle term is with respect to *both* its extremes the term that subsumes or the predicate – not a term for once also subsumed or the subject. Now as *a species* of syllogism, it ought to conform to the latter, and this can only happen on condition that, inasmuch as the one connection S-U already possesses the appropriate relation, the other connection P-U contains it too. This occurs in a judgment in which the relation of subject and predicate is an indifferent one, in a *negative* judgment. Thus does the syllogism become legitimate, but the conclusion is necessarily negative.

Consequently, also indifferent is now which of the two determinations of this proposition is taken as predicate or subject, and whether the determination is taken in the syllogism as the extreme of singularity or the extreme of particularity, hence as the minor or major term. Since on the usual assumption which of the premises is supposed to be the major or the minor depends on this distinction, this too has now become a matter of indifference. – This is the ground of the customary *fourth figure* of the syllogism which was unknown to Aristotle and has to do with an entirely void and uninteresting distinction. In it the immediate position of the terms is the *reverse* of their position in the first figure; since from the point of view of the formal treatment of judgment the subject and predicate of the negative conclusion do not have the determinate relation of subject and predicate, but each can take the place of the other, it is a matter of **12.104**

indifference which term is taken as subject and which as predicate; and just as indifferent is therefore which premise is taken as the major and which as the minor. – This indifference, to which the determination of particularity also contributes (especially if it is noted that this particularity can be taken in a comprehensive sense), makes of this fourth figure something totally idle.

3. The objective significance of the syllogism in which the universal is the middle is that the mediating term, as the unity of the extremes, is *essentially a universal*. But since the universality is at first only qualitative or abstract, the determinateness of the extremes is not contained in it; their being conjoined in the conclusion, if the conjunction is to take place, must likewise have its ground in a mediation that lies outside this syllogism and is, with respect to the latter, just as contingent as it is in the preceding forms of the syllogism. But now, since the universal is determined as the middle term, and since the determinateness of the extremes is not contained in this middle, the latter is posited as one which is wholly indifferent and external. – It is here, by virtue indeed of a bare abstraction, that a *fourth figure* of the syllogism arose in the first place, namely the figure of the *relationless* syllogism, U-U-U, which abstracts from the qualitative differentiation of the terms and therefore has their merely external unity, their *equality*, for its determination.

d. The fourth figure: U-U-U, or the mathematical syllogism

1. The mathematical syllogism goes like this: *if two things or two determinations are equal to a third, then they are equal to each other*. – The relation of inherence or subsumption of terms is done away with.

A "third" is in general the mediating term; but this third has absolutely no determination as against the extremes. Each of the three terms can therefore be the mediating term just as well as any other. Which is needed for the job, which of the three connections are therefore to be taken as immediate, and which as mediated, depends on external circumstances and other conditions, namely which two of the three are immediately *given*. But this determination does not concern the syllogism and is wholly external.

2. The mathematical syllogism ranks in mathematics as an *axiom*, *as a first self-explanatory proposition* which is neither capable nor in need of proof, i.e of any mediation – which neither presupposes anything else nor can be derived from anything else. – If we take a closer look at this prerogative that
12.105 the proposition claims, of being immediately *self-evident*, we find that it lies

in its formalism, in the fact that it abstracts from every qualitative diversity of determinations and only admits their quantitative equality or inequality. But for this very reason it is not without presupposition or mediation; the quantitative determination, which alone comes into consideration in it, is only *by virtue of the abstraction* from qualitative differentiation and from the concept determinations. – Lines, figures, posited as equal to each other, are understood only according to their magnitude. A triangle is posited as equal to a square, not however as triangle to square but only according to magnitude, etc. Nor does the concept and its determinations enter into this syllogism; there is in it, therefore, no *conceptual comprehension* at all; the understanding is also not faced here by even the formal, abstract determinations of the concept. The self-evidence of this syllogism rests, therefore, solely on the indigence and abstractness of its mode of thought.

3. But the *result of the syllogism of existence* is not just this abstraction from all determinateness of the concept; the *negativity* of the immediate and abstract determinations that emerged from it has yet another *positive* side, namely that in the abstract determinateness *its other has been posited* and the determinateness has thereby become *concrete*.

In the first place, the syllogisms of existence all have one another for *presupposition*, and the extremes conjoined in the conclusion are truly conjoined, in and for themselves, only inasmuch as they are *otherwise* united by an identity grounded elsewhere; the middle term, as constituted in the syllogisms we have examined, *ought* to be the conceptual unity of these syllogisms but is in fact only a formal determinateness that is not posited as their concrete unity. But what is thus *presupposed* by each and every of these mediations is not merely a *given immediacy* in general, as is the case for the mathematical syllogism, but is itself a mediation, namely of each of the other two syllogisms. Therefore, what is truly present here is not a mediation based on a given immediacy, but a mediation based on mediation. And this mediation is not quantitative, not one that abstracts from the form of mediation, but is rather a *self-referring mediation*, or the *mediation of reflection*. The circle of reciprocal presupposing which these syllogisms bring to closure is the turning back of this presupposing into itself – a presupposing that in this turning back forms a totality, and has the *other* to which every single syllogism refers, not *outside* by virtue of abstraction, but included *within* the circle.

Further, from the side of the *single determinations of form* it has been shown that in this whole of formal syllogisms each single determination has in turn occupied the *place of the middle term*. As immediate, this term **12.106**

was determined as *particularity*; thereupon, through dialectical movement it determined itself as *singularity* and *universality*. Likewise did each of these determinations occupy *the places of both of the two extremes*. *The merely negative result* is the dissolution of the qualitative determinations of form into the merely quantitative, mathematical syllogism. But what we truly have here is the *positive result*, namely that mediation occurs, not through any *single* qualitative determinateness of form, but through the *concrete identity* of the determinacies. The deficiency and formalism of the three figures of the syllogism just considered consists precisely in this, that one such single determinateness was supposed to constitute the middle term in it. – Mediation has thus determined itself as the indifference of the immediate or abstract determinations of form and the positive *reflection* of one into the other. The immediate syllogism of existence has thereby passed over into the *syllogism of reflection*.

Remark

In the account here given of the nature of the syllogism and its various forms, passing reference was also made to what constitutes in the ordinary examination and treatment of the syllogisms the main object of interest, namely how the right conclusion may be drawn in each figure; but only the main point came in for consideration, and no mention was made of the cases and the intricacies that arise when the distinction of positive and negative judgment is also brought in alongside the determination of quantity, of particularity especially. – A few comments on how the syllogism is ordinarily viewed and treated in logic have their place here. – This doctrine was famously elaborated to such precision of detail that its hair-splittings, as they came to be called, have been the object of universal aversion and disgust. The *natural understanding*[85] in asserting itself over the unsubstantial forms of reflection in all areas of humanistic culture also turned against this artificial knowledge of the forms of reason, believing that it could dispense with the science of such forms on the ground that it performed the individual operations of thought treated there naturally and spontaneously, without specialized training. Indeed, with respect to rational thinking, if its pre-condition were the laborious study of syllogistic formulas, humankind would be in just as sorry a state as they would (as we already remarked in the Preface)[86] if they could not walk or digest without the previous study of anatomy and physiology. But if we admit that there might be some use to the study of these sciences for dietary purposes,

[85] The reference here is to common-sense philosophy. [86] Cf. GW 11, 6; above, 21.6.

surely we must credit the study of the forms of reason with an even more important influence on the correctness of thinking. But without going here into this aspect of the study that concerns the education of subjective thinking and hence, strictly speaking, pedagogics, it must be granted that a study that has for its subject matter the modes of operation and the laws of reason must be of the greatest interest in and of itself – an interest at least not inferior to the knowledge of the laws and the particular shapes of nature. If it is not reputed a small matter to have discovered some sixty species of parrots, one hundred and thirty-seven species of veronica, and so on, much less ought it to be reputed a small matter to have discovered the forms of reason. Is not the figure of a syllogism something infinitely higher than a species of parrot or veronica? **12.107**

Yet, although contempt for the knowledge of the forms of reason must be viewed as nothing short of barbarism, it must equally be granted that the customary exposition of the syllogism and of its particular configurations is not a *rational* cognition, not an exposition of them as *forms of reason*, and that syllogistic wisdom has by its own unworthiness brought upon itself the disparagement that it has experienced. Its deficiency consists in the fact that it simply stops short at the *form which the understanding gives* to the syllogism and in which the determinations of the concept are taken as *abstract* formal determinations. It is all the more inconsequent to cling to them as abstract qualities, since in the syllogism it is their *connections* that constitute the essential element, and the inherence and the subsumption already imply that the singular, since the universal inheres in it, is itself universal, and the universal, since it subsumes the singular, is itself singular; more to the point, the syllogism expressly posits this very *unity* as the *middle term*, and its determination is *mediation* itself, that is, the concept determinations no longer have, as they did in judgment, their reciprocal externality for their basis, but rather their unity. – It is thus the concept of the syllogism that gives away the imperfection of the formal syllogism in which the middle is supposed to be held fixed, not as the unity of the extremes, but as a formal and abstract determination, qualitatively at variance with them. – The treatment is made even more vacuous by the fact that such connections or judgments in which the formal determinations become indifferent, as in negative and particular judgments, and which therefore approximate propositions, are also still regarded as perfect relations. – Now since the qualitative form S-P-U is generally accepted as ultimate and absolute, the dialectical treatment of the syllogism falls entirely by the wayside, and the rest of the syllogisms are thereby treated, not as *necessary alterations* of that form, but as *species*. – It is

then indifferent whether the first formal syllogism is regarded as itself only
12.108 one species alongside the others or as rather *genus* and species at the same time. This last is the case when the rest of the syllogisms are reduced to the first. But even when this reduction is not explicitly carried out, the basis is yet always the same formal relation of external subsumption expressed by the first figure.

This formal syllogism is the contradiction that the middle term ought to be the determinate unity of the extremes – not, however, as this unity but as a determination qualitatively distinct from the terms whose unity it ought to be. Because the syllogism is this contradiction, it is inherently dialectical. Its dialectical movement displays it in the full range of the moments of the concept, so that not only the said relation of subsumption or particularity, but *just as essentially* the negative unity and the universality, are moments in the process of closing this unity. In so far as each of these equally is by itself only a one-sided moment of particularity, they are likewise imperfect middle terms, but at the same time they constitute the developed determinations of the middle term; the entire course across the three figures displays this middle in each of these determinations, one after the other, and the true result that emerges from it is that the middle is not any single one of them but the totality of them all.

The deficiency of the formal syllogism does not rest, therefore, in the *form of the syllogism* (which is, on the contrary, the form of rationality) but in that the form is only an *abstract* one, and hence void of the concept. It was shown that the abstract determination, on account of its abstract self-reference, can equally be regarded as content.[87] But then, all that the formal syllogism achieves is that a connection of subject and predicate follows or does not follow *from only this middle term*. It does not help to prove a proposition by means of it; on account of the abstract determinateness of the middle term which is a quality without concept, there can just as well be other middle terms from which the opposite would follow; even from the same middle term opposite predicates can also be deduced in turn through further middle terms. – Besides being of little use, the formal syllogism is also something very simple; the many rules that have been fabricated are already tiresome because they contrast so strongly with the simplicity of the fact at issue, but then also because they apply to cases where the formal worth of the syllogism is especially diminished by the externality of the form determination, notably that of particularity (especially because for

[87] Hegel is very likely referring to the classical "atoms" which, as empty self-references, acquire an immediate, external, existence. Cf. the Remark above, 21.153ff.; GW 11, 93.

this purpose the latter must be taken in a comprehensive sense), and where even with respect to the form only totally empty results are produced. – But the most justified and important aspect of the disfavor into which syllogistic theory has fallen is that, as such a long-drawn-out occupation with a subject matter whose single content is none other than the *concept*, **12.109** it is itself without concept. – The many syllogistic rules remind one of the procedure of the arithmeticians who also give a great many rules about arithmetical operations, all of which presuppose that one has not the *concept* of operation. – But numbers are a material with no concept and the operations of arithmetic are an external combining or separating, a mechanical procedure – indeed, calculating machines have been invented that execute these operations perfectly well. The form determinations of the syllogism are on the contrary concepts, and it is the most glaring of scandals when they are treated as a material with no concept.

The extreme example of this mechanical treatment of the concept determinations of the syllogism is surely that of Leibniz.[q] He subjected the syllogism to a combinatory calculus, thereby reckoning the number of possible positions of the syllogism – that is, with respect to the distinction of positive and negative, then of universal, particular, indeterminate and singular judgments. He found that there are 2,048 such possible combinations, of which, after the exclusion of the useless figures, 24 useful ones remain. – Leibniz makes much of the usefulness of this combinatory analysis, not only in order to discover the forms of the syllogism but also the combinations of other concepts. The operation by which this is accomplished is the same as calculating how many combinations of letters an alphabet allows, how many throws are possible in a game of dice, how many plays with an ombre card, etc. We see here the determinations of the syllogism thus placed in the same class as the points of the dice and the ombre card; we see the rational treated as something dead and empty of concept, the neglect of that which characterizes the concept and its determinations most, namely that these, as spiritual essences, *enter into connections* and thereby sublate their *immediate* determination. – This Leibnizian application of combinatory calculus to the syllogism and to the combination of other concepts differs from the disreputable *Art* of Lully[89] solely because it is more methodical on the *numerical* side, but for the rest it equals it in meaninglessness. – Connected with this was an idea dear to

[q] *Opp. Tom.* II, P. I.[88]

[88] Leibniz, *Dissertatio de arte combinatoria*, *Opera* (ed. Dutens), Tomus II, Pars I, 352–361.

[89] Raymond Lully, *c.* 1232–1315. His calculation tables were reproduced in the *Ars magna sciendi* (1669) by the Jesuit Athanasius Kircher.

Leibniz, one which he conceived in his youth and, despite its immaturity and shallowness, never abandoned even in later life.[90] This was the idea of a *characteristica universalis* of concepts – a standard language in which each concept is presented as a connection of other concepts or as connecting with others – as if in a rational combination, which is essentially dialectical, a content would still retain the same determinations that it has when fixed
12.110 in isolation.

Ploucquet's calculus has undoubtedly hit upon the most consequent method for preparing the syllogistic relation to be subjected to calculus.[91] It is based on abstracting in a judgment from the difference of relation, the difference of singularity, particularity, and universality, and restricting oneself to the *abstract identity* of subject and predicate whereby the two are in *mathematical equality* – a connection that makes of the syllogistic inference a totally empty and tautological construal of propositions. – In the proposition, "the rose is red," the predicate is taken to mean not the universal red but only the determinate *red of the rose*; in the proposition, "all Christians are human beings," the predicate is taken to mean only those humans who are Christian, from which proposition and the proposition, "the Jews are not Christian," there follows the conclusion (which did not recommend this syllogistic calculus to Mendelssohn) that "therefore the Jews are not humans" (namely, not those humans that the Christians are). – Ploucquet states as a consequence of his invention: *posse etiam rudes mechanice totam logicam doceri, uti pueri arithmeticam docentur, ita quidem, ut nulla formidine in ratiociniis suis errandi torqueri, vel fallaciis circumveniri possint, si in calculo non errant*.[92] – This recommendation, that by means of calculus the whole of logic can mechanically be made available to the uneducated, is surely the worst that can be said of an invention that bears on the presentation of the science of logic.

[90] See Leibniz, *Nouveaux essais sur l'entendement par l'auteur du système de l'harmonie préestablie*, in *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*, Vol. 5, ed. C. J. Gerhardt (Hildesheim: Georg Olms, 1960), pp. 365f.; *New Essays on Human Understanding*, trans., ed. Peter Remnant and Jonathan Bennett (Cambridge: Cambridge University Press, 1981), pp. 384f.

[91] Gottfried Plouquet (1716–1790), *Expositiones Philosophiæ Theoreticæ*, *Logik* (1782), ed., trans. into German (original Latin text included), Michael Franz, *Studien und Materialen zur Geschichte der Philosophie* (Hildesheim: Olms, 2006).

[92] "I can teach the whole logic mechanically even to the uneducated, just as children are taught arithmetic, so that, if there is no error of calculation, it would be possible not to be tormented by the fear of erring in reasoning or of being deceived by falsities." According to the editors of the critical edition, this quote is not taken directly from Plouquet. GW 12, 347 (to page 110.14–18). In §70 of the 1782 edition (see previous note 91), Plouquet only says that "by means of this [following] theory, the whole business of syllogistic discovery and judgment . . . can be taken care of with the greatest facility and be reduced without fear of error to a logical calculus."

B. THE SYLLOGISM OF REFLECTION

The course of the qualitative syllogism has sublated the *abstractness* of its terms; the syllogistic term has thus posited itself as a determinateness in which also the other determinateness *shines reflectively*. Besides the abstract terms, there is also present in the syllogism the *connection of* the terms, and in the conclusion this connection is posited as one which is mediated and necessary; in truth, therefore, each determinateness is posited, not singly by itself, but with reference to the others, as *concrete* determinateness.

The *middle term* was the abstract particularity, an isolated simple determinateness, and was a middle only externally and relative to the self-subsisting extremes. This term is now posited as the *totality* of the determinations; thus it is the *posited* unity of the extremes; but this unity is at first that of a reflection embracing the extremes within itself – an embracing which, as a *first* sublating of immediacy and a first connecting of the determinations, is not yet the absolute identity of the concept. **12.III**

The extremes are the determinations of the judgment of reflection, *singularity* proper, and *universality* as a determination of relation, or a reflection that embraces a manifold within itself. But, as was shown in connection with the judgment of reflection,[93] the singular subject also contains, besides the mere singularity that belongs to form, determinateness as universality absolutely reflected into itself, as presupposed, that is, here still immediately assumed, *genus*.

From this determinateness of the extremes, which belongs to the course of the determination of the judgment, there results the more precise content of the *middle*, which is what counts most in the syllogism, for it is the middle that distinguishes the syllogism from judgment. The middle contains (1) *singularity*; (2) but singularity expanded into universality, as an "all"; (3) the universality that lies at the basis, uniting singularity and abstract universality in itself, *the genus*. – The syllogism of reflection is thus the *first to possess genuine determinateness* of form, for the middle is *posited* as the totality of determinations; the immediate syllogism is by contrast *indeterminate* because the middle is still only abstract particularity in which the moments of its concept are not yet posited. – This first syllogism of reflection may be called the *syllogism of allness*.

[93] Cf. above, 12.73–74.

a. The syllogism of allness

1. The syllogism of allness is the syllogism of the understanding in its perfection, but more than that it is not yet. That the middle in it is not *abstract* particularity but is developed into its moments and is therefore concrete, is indeed an essential requirement of the concept. But at first the form of the *allness* gathers the singular into universality only externally, and conversely the singular behaves in the universality still as an immediate that subsists on its own. The negation of the immediacy of the determinations which was the result of the syllogism of existence is only the *first* negation, not yet the negation of the negation, or absolute immanent reflection. The singular determinations that the universality of reflection holds within still lie, therefore, at the basis of that universality – in other words, allness is not yet the universality of the concept, but the external universality of reflection.

The syllogism of existence was contingent because its middle term was one single determinateness of the concrete subject and as such admitted of a multitude of other such middle terms, and consequently the subject could be conjoined in conclusion with an indeterminate number of other predicates, with opposite predicates as well. But since the middle term
12.112 now contains *singularity* and is thereby itself concrete, only a predicate that concretely belongs to the subject can be attached to the latter by means of it. – For instance, if from the middle term "green" the conclusion is made to follow that a painting is pleasing, because green is pleasing to the eye, or if a poem, a building, etc., is said to be beautiful because it possesses *regularity*, the painting, the poem, the building, etc., may nonetheless still be ugly on account of other determinations from which this predicate "ugly" might be deduced. By contrast, when the middle term has the determination of *allness*, it contains the green, the regularity, as *a concreted term* which for that very reason is not the abstraction of a mere green, a mere regular, etc.; only predicates commensurate with *concrete totality* may now be attached to this *concreted term*. – In the judgment, "what is green or regular is pleasing," the subject is only the abstraction of green, regularity; in the proposition, "all things green or regular are pleasing," the subject is on the contrary all actual concrete things that are green or regular – things, therefore, that are intended *as concreted* with *all the properties* that they may also have besides the green or the regularity.

2. However, this very reflective perfection of the syllogism makes of it a mere illusion. The middle term has the determinateness of "all," to which there is *immediately* attached in the major the predicate which in the

conclusion is then conjoined with the subject. But the "all" is "all singulars"; in it, therefore, the subject already possesses that predicate immediately – it *does not first obtain it by means of the syllogistic inference*. – Or again, the subject obtains a predicate as a consequence through the conclusion; but the major premise already contains this conclusion in it; *therefore the major premise is not correct on its own account*, or is not an immediately presupposed judgment, but *itself already presupposes the conclusion* of which it should be the ground. – In the much cited syllogism:

All humans are mortal,
Now Gaius is a human,
Therefore Gaius is mortal,

the major premise is correct only because and to the extent that the *conclusion is correct*; were Gaius by chance not mortal, the major premise would not be correct. The proposition which was supposed to be the conclusion must be correct on its own, immediately, for otherwise the major premise would not include all singulars; before the major premise can be accepted as correct, the *antecedent* question is whether the conclusion may not be a counter-*instance* of it.

3. It followed from the concept of the syllogism, with regard to the syllogism of existence, that the premises, *as immediate*, contradicted the conclusion, that is to say, contradicted the *mediation* that the concept of the syllogism requires; that the first syllogism thus presupposed other **12.113** syllogisms, and conversely these presupposed the first.[94] In the syllogism of reflection this result is posited in the syllogism itself: the major premise presupposes its conclusion, for it contains the union of the singular with a predicate that would have to be a conclusion first.

What we have here in fact can therefore be expressed by saying that the syllogism of reflection is only an external, empty *reflective semblance of syllogistic inference*; that therefore the essence of the inference rests on subjective *singularity*; this singularity thus constitutes the middle term and is to be posited as such: singularity which is singularity as such and possesses universality only externally. – Or what has been shown on closer inspection of the content of the syllogism of reflection is that the singular stands connected to its predicate *immediately*, not by way of an inference, and that the major premise, the union of a particular with a universal, or more precisely of a formal universal with a universal in itself, is mediated through the connection of the singularity that is present in

[94] Cf. above, 12.97–98.

the formal universal, of singularity as allness. But this is *the syllogism of induction*.

b. The syllogism of induction

1. The syllogism of allness comes under the schema of the first figure, S-P-U; the syllogism of induction under that of the second, U-S-P, because it again has singularity for its middle term, not *abstract* singularity but singularity as *completed*, that is to say, posited with its opposite determination, that of universality. – The *one extreme* is some predicate or other which is common to all these singulars; its connection with them makes up the kind of immediate premises, of which one was supposed to be the conclusion in the preceding syllogism. – The *other extreme* may be the immediate *genus*, as it is in the middle term of the preceding syllogism, or in the subject of the universal judgment, and which is exhausted in the collection of singulars or also species of the middle term. Accordingly, the syllogism has this configuration:

s
s
U – – P
s
s
ad
infinitum.

2. The second figure of the formal syllogism, U-S-P, does not correspond to this schema, because the S that constitutes the middle term did not
12.114 subsume or was not a predicate. In induction this deficiency is eliminated; here the middle term is "all singulars"; the proposition, U-S, which contains as the subject the objective universal or the genus set apart as an extreme, has a predicate which is of at least equal extension as the subject and is consequently identical with it for external reflection. Lion, elephant, etc., constitute the *genus* of quadruped; the difference, that *the same* content is posited once in singularity and again in universality, is thus just an *indifferent determination of form* – an indifference which in the syllogism of reflection is the posited result of the formal syllogism and is posited here through the equality of extension.

Induction, therefore, is not the syllogism of mere *perception* or of contingent existence, like the second figure corresponding to it, but the syllogism of *experience* – of the subjective gathering together of singulars in the genus,

and of the conjoining of the genus with a universal determinateness on the ground that the latter is found in all singulars. It also has the objective significance that the immediate genus has determined itself through the totality of singularity as a universal property and possesses its existence in a universal relation or mark. – But the objective significance of this syllogism, as it was of the others, is at first only its inner concept, and is not as yet posited in it.

3. On the contrary, induction is essentially still a subjective syllogism. The middle terms are the singulars in their immediacy, the collecting of them into a genus through the allness is an *external* reflection. Because of the persisting *immediacy* of the singulars and because of the *externality* that derives from it, the universality is only completeness, or rather, it remains *a task*. – In induction, therefore, there recurs the *progression* into the bad infinity; *singularity* ought to be posited as *identical* with *universality*, but since the *singulars* are equally posited as *immediate*, the intended unity remains only a perpetual *ought*; it is a unity of *likeness*; the terms which are supposed to be identical are at the same time supposed *not* to be identical. The a, b, c, d, e, constitute the genus only further on, in the infinite; they do not yield a complete experience. The *conclusion* of induction thus remains *problematic*.

But induction, by expressing that perception, in order to become experience, *ought* to be carried on *to infinity*, presupposes that the genus is *in and for itself* conjoined with its determinateness. In this, it in fact rather presupposes its conclusion as something immediate, just as the syllogism of allness presupposes the conclusion for one of its premises. – An experience that rests on induction is assumed as valid *even though* the perception is admittedly *not complete*; it may be assumed, however, that there is no **12.115**
counter-instance to the experience only if the latter is true *in and for itself*. Inference by induction, therefore, is based indeed on an immediacy, but not on the immediacy on which it is supposed to be based, not on a *singularity* that *exists* immediately, but *on one that exists in and for itself*, on the *universal*. – The fundamental character of induction is that it is a syllogistic inference; if singularity is taken as the essential determination of the middle term, but universality as only the external determination, then the middle term would fall apart into two disjoined parts, and there would be no inference; this externality belongs rather to the extremes. *Singularity* can only be a middle term *if immediately identical* with the *universality*; such a universality is in truth *objective universality*, *the genus*. – The matter can also be viewed in this way: universality is *external but essential* to the determination of the singularity which is at the basis of the middle term of

induction; such an *external* is just as much immediately its opposite, the *internal*. – The truth of the syllogism of induction is therefore a syllogism that has for its middle term a singularity which is immediately *in itself* universality. This is *the syllogism of analogy*.

c. The syllogism of analogy

1. This syllogism has the third figure of the immediate syllogism, S-U-P, for its abstract schema. But its middle term is no longer some single quality or other but a universality which is *the immanent reflection of a concreted term* and is therefore its *nature*; and conversely, since it is thus the universality of a concreted term, it is at the same time in itself this *concreted term*. – Here, therefore, a singular is the middle term, but a singular taken in its universal nature; there is moreover another singular, an extreme term, which has the same universal nature as the other which is the middle term. For example:

> *The earth* has inhabitants,
> The moon is *an earth*,
> Therefore the moon has inhabitants.[95]

2. Analogy is all the more superficial, the more the universal in which the two extremes are united, and in accordance with which the one extreme becomes the predicate of the other, is a mere *quality* or, since quality is a matter of subjectivity, is some *distinctive mark* or other and the identity of the extremes is therein taken as just a *similarity*. But this kind of superficiality to which a form of understanding or of reason is reduced by being debased to the sphere of mere *representation* should have no place in logic. –
12.116 Also unacceptable is to present the major premise of this syllogism as though it should run: "That which is similar to an object in one distinctive mark is similar to it in other such marks as well." On this formulation, *the form of the syllogism* is expressed in the shape of a content while the empirical content, the content properly so called, is together relegated to the minor premise. So, for example, could also the whole form of the first syllogism be expressed as its major premise: "That which is subsumed under another thing in which a third thing inheres has that third thing inhering in it too; but now . . . etc." But what matters in the syllogism as such is not the

[95] This example is not original with Hegel and very likely was a common trope at the time. One can find it, for instance, in Antonio Genovesi, *Elementa artis logico-criticæ*, Liber V (Venice, 1749), p. 179, and also, by the same author, *Gli elementi dell'arte logico-critica*, 2nd edn (Venice, 1783), p. 148. In Genovesi's treatise, syllogism of analogy follows immediately upon the treatment of probability, exactly as it does in Hegel.

empirical content, and to make its own form the content of a major premise makes just as little difference as to take any other empirical content for that purpose. Nothing of consequence follows for the syllogism of analogy from a content that contains nothing but the form peculiar to that syllogism, just as nothing of consequence would have followed for the first syllogism from having as its content the form that makes the syllogism a syllogism. – What counts is always the form of the syllogism, whether the latter has itself or something else for its empirical content. So the syllogism of analogy is a form peculiarly its own, and it is vacuous not to want to regard it as such on the ground that that form could be made into the content or matter of a major premise whereas matter is no concern in logic. – What might tempt one to this view in regard to the syllogism of analogy, and perhaps in regard to the syllogism of induction too, is that the middle term in them, and also the extremes, are more determined than they are in the merely formal syllogism, and therefore the determinations of form, since they are no longer simple and abstract, must also take on the appearance of a *content determination*. But that the form determines itself to content is *first of all* a necessary advance on the part of the formal side, and therefore an advance that touches the nature of the syllogism essentially; *secondly*, such a content determination cannot, therefore, be regarded as any other empirical content, and abstraction cannot be made from it.

When we consider the syllogism of analogy with its major premise expressed as above, namely, "if two subject matters agree in one or more properties, then a further property of one also belongs to the other," it may seem that this syllogism contains *four terms*, the *quaternio terminorum* – a circumstance that brings with it the difficulty of how to bring analogy into the form of a formal syllogism. – There are *two* singulars; for a *third*, a property immediately assumed as common, and, for a *fourth*, the other properties that one singular possesses immediately but the other first comes **12.117**
to possess only by means of the syllogism. – This is so because, as we have seen, in the syllogism of analogy *the middle term* is posited as singularity but immediately *also* as the true universality of the singularity. – In *induction*, the middle term is, apart from the extremes, an indeterminate number of singulars; this syllogism, therefore, required the enumeration of an infinite number of terms. – In the syllogism of allness the universality in the middle term is still only the external form determination of the allness; in the syllogism of analogy, on the contrary, it is as essential universality. In the above example, the middle term, "the earth," is taken as something concrete which, in truth, is just as much a universal nature or genus as it is a singular.

From this aspect, the *quaternio terminorum* would not make analogy an imperfect syllogism. But it would make it so from another aspect; for although the one subject has the same universal nature as the other, it is undetermined whether the determinateness, which is inferred to pertain also to the second subject, pertains to the first because of its *nature in general* or because of its *particularity*; for example, whether the earth has inhabitants as a heavenly body *in general* or only as this *particular* heavenly body. – Analogy is still a syllogism of reflection inasmuch as singularity and universality are united in its middle term *immediately*. Because of this immediacy, the *externality* of the unity of reflection is still there; the singular is the genus only *in itself*, *implicitly*; it is not posited in this negativity by which its determinateness would be the genus's own determinateness. For this reason the predicate that belongs to the singular of the middle term is not already the predicate of the other singular, even though the two singulars both belong to the one genus.

3. S-P ("the moon is inhabited") is the conclusion; but the one premise ("the earth is inhabited") is likewise S-P; in so far as S-P is supposed to be a conclusion, it entails the requirement that that premise also be S-P. This syllogism is thus in itself the demand to counter the immediacy that it contains; or again, it presupposes its conclusion. One syllogism of existence has its presupposition in the *other* syllogism of existence. In the syllogisms just considered, the presupposition has been moved into them, because they are syllogisms of reflection. Since the syllogism of analogy is therefore the demand that it be mediated as against the immediacy with which its mediation is burdened, what it demands is the sublation of the moment of *singularity*. Thus there remains for the middle term the objective universal, the *genus* purified of immediacy. – In the syllogism of analogy the genus was a moment of the middle term only as *immediate presupposition*; since the syllogism itself demands the sublation of the presupposed immediacy, the negation of singularity and hence the universal is no longer immediate
12.118 but *posited*. – The syllogism of reflection contained the *first* negation of immediacy; the second has now come on the scene, and with it the external universality of reflection is determined as existing in and for itself. – Regarded from the positive side, the conclusion shows itself to be identical with the premises, the mediation to have rejoined its presupposition, and what we have is thus an identity of the universality of reflection by virtue of which it becomes a higher universality.

Reviewing the course of the syllogism of reflection, we find that mediation is in general the *posited* or *concrete* unity of the form determinations of the extremes; reflection consists in this positing of the one determination

in the other; the mediating middle is thus *allness*. But it is *singularity* that proves to be the essential ground of mediation while universality is only as an external determination in it, as *completeness*. But universality is *essential* to the singular if the latter is to be the conjoining middle term; the singular is therefore to be taken as an *implicitly existing* universal. But the singular is not united with it in just this positive manner but is sublated in it and is a negative moment; thus the universal is the genus posited as existing in and for itself, and the singular as immediate is rather the externality of the genus, or it is an *extreme*. – The syllogism of reflection, taken in general, comes under the schema P-S-U in which the singular is still as such the essential determination of the middle term; but since its immediacy has been sublated, the syllogism has entered under the formal schema S-U-P, and the syllogism of reflection has thus passed over into the *syllogism of necessity*.

c. the syllogism of necessity

The mediating middle has now determined itself (1) as *simple* determinate universality, like the particularity in the syllogism of existence, but (2) as *objective* universality, that is to say, one that, like the allness of the syllogism of reflection, contains the whole determinateness of the different extremes; this is a *completed* but *simple* universality, the *universal nature* of the fact, the *genus*.

This syllogism is *full of content*, because the *abstract* middle term of the syllogism of existence has posited itself to be *determinate difference*, in the way it is as the middle term of the syllogism of reflection, but this difference has again reflected itself into simple identity. – This syllogism is for this reason the syllogism of *necessity*, because its middle term is not any adventitious immediate content but is the immanent reflection of the **12.119**
determinateness of the extremes. These have their inner identity in the middle term, whose content determinations are the form determinations of the extremes. – Consequently, what differentiates the terms is a form which is *external* and *unessential* and the terms themselves are as moments *of a necessary* existence.

This syllogism is at first immediate and formal in the sense that *what holds* the terms *together* is the *essential nature*, as *content*, and this content is in the distinguished terms only in *different form*, and the extremes are by themselves only an *unessential* subsistence. – The realization of this syllogism is a matter of determining it in such a way that the *extremes* are equally posited as this totality which initially the middle term is, and the

necessity of the connection, which is at first only the substantial *content*, shall be a connection of the *posited form*.

a. The categorical syllogism

1. The categorical syllogism has the categorical judgment for one or for both of its premises. – Associated with this syllogism, just as with that judgment, is the more specific signification that its middle term is the *objective universality*. Superficially, the categorical syllogism is also taken for nothing more than a mere syllogism of inherence.

Taken in its full import, the categorical syllogism is the *first syllogism of necessity*, one in which a subject is conjoined with a predicate through *its substance*. But when elevated to the sphere of the concept, substance is the universal, so posited to be in and for itself that it has for its form or mode of being, not accidentality, as it has in the relation specific to it, but the determination of the concept. Its differences are therefore the extremes of the syllogism, specifically universality and singularity. This universality, as contrasted with the *genus* that more closely defines the middle term, is abstract or is a universal determinateness: it is the accidentality of substance summed up in a simple determinateness which is, however, the substance's essential difference, its *specific difference*. – Singularity, for its part, is the actual, in itself the concrete unity of genus and determinateness – though here, in the immediate syllogism, it is immediate singularity at first, accidentality summed up in the form of a subsistence *existing for itself*. – The connection of this extreme term to the middle term constitutes a categorical judgment; but since the other extreme term also, as just determined, expresses the specific difference of the genus or its determinate principle, this other premise is also
12.120 categorical.

2. This syllogism, as the first and therefore immediate syllogism of necessity, comes in the first instance under the schema of the formal syllogism, S-P-U. – But since the middle term is the essential *nature* of the singular and not just *one or other* of its determinacies or properties, and likewise the extreme of universality is not any abstract universal, nor just any singular quality either, but is rather the universal determinateness of the genus, its *specific difference*, we no longer have the contingency of a subject being conjoined with just *any quality* through just *any middle term*. – Consequently, since the *connections* of the extremes with the middle term also do not have the external immediacy that they have in the syllogism of existence, we do not have coming into play the demand for proof in the sense in

which it occurred in the case of that other syllogism and led to an infinite progression.

Further, this syllogism does not presuppose its conclusion for its premises, as in the syllogism of reflection. The terms, in keeping with the substantial content, stand to one another in a connection of identity that exists *in and for itself*; we have here *one* essence running through the three terms – an essence in which the determinations of singularity, particularity, and universality are only *formal* moments.

To this extent, therefore, the categorical syllogism is no longer subjective; in that connection of identity, objectivity begins; the middle term is the identity, full of content, of its extremes, and these are contained in it in their self-subsistence, for their self-subsistence is the said substantial universality which is the genus. The subjective element of the syllogism consists in the indifferent subsistence of the extremes with respect to the concept or the middle term.

3. But there is still a subjective element in this syllogism, for that identity is still the substantial identity or *content* but is not yet *identity of form* at the same time. The identity of the concept still is an *inner* bond and therefore, as connection, still *necessity*; the universality of the middle term is solid, *positive* identity, but is not equally the *negativity of its extremes*.

The immediacy of this syllogism, which is not yet *posited* as what it *is in itself*, is more precisely present in this way. The truly immediate element of the syllogism is the *singular*. This singular is subsumed under its genus as middle term; but subsumed under the same genus are also an *indeterminate number of many* other singulars; it is therefore *contingent* that only *this* singular is posited as subsumed under it. – But further, this contingency does not belong only to an *external reflection* that finds the singular posited in the syllogism to be contingent by *comparison* with others; on the contrary, it is because the singular is itself connected to the middle term as its objectivity universality that it is posited as *contingent*, as a subjective actuality. From the other side, because the subject is an *immediate* singular, it contains determinations that are not contained in the middle **12.121**
term as the universal nature; it also has, therefore, a concrete existence which is indifferent to the middle term, determined for itself and with a content of its own. Therefore, conversely, this other term also has an indifferent immediacy and a concrete existence distinct from the former. – The same relation also obtains between the middle term and the other extreme; for this too likewise has the determination of immediacy, hence of a being which is contingent with respect to the middle term.

Accordingly, what is posited in the categorical syllogism are, *on the one hand*, extremes that are so related to the middle term that they have objective universality or self-subsistent nature *in themselves*, and are at the same time immediate *actualities*, hence *indifferent* to one another. *On the other hand*, they are equally *contingent*, or their immediacy is as sublated in their identity. But this identity, because of the self-subsistence and totality of the actuality, is only formal, inner identity, and the syllogism of necessity has thereby determined itself to the *hypothetical syllogism*.

b. The hypothetical syllogism

1. The hypothetical judgment contains only the necessary *connection* without the immediacy of the connected terms. "If A is, so is B"; or, the being of A is also just as much the being of *an other*, of the B; with this, it is not as yet said either that A *is*, or that B *is*. The hypothetical syllogism adds this *immediacy* of being:

If A is, so is B,
But A is,
Therefore B is.

The minor premise expresses by itself the immediate being of the A.

But it is not only this that is added to the judgment. The conclusion contains the connection of subject and predicate, not as the abstract copula, but as the accomplished *mediating* unity. The being of the A is to be taken, therefore, *not as mere immediacy* but essentially as *middle term of the syllogism*. This needs closer examination.

2. In the first place, the connection of the hypothetical judgment is the *necessity* or the inner *substantial identity* associated with the external diversity of concrete existence – an identical *content* lying internally as its basis. The two sides of the judgment are both, therefore, not an immediate being, but a being held in necessity, hence one which is at the same time
12.122 *sublated* or only being as appearance. The two behave, moreover, as sides of the judgment, as *universality* and *singularity*; the one, therefore, is the above content as *totality of determinations*, the other as *actuality*. Yet it is a matter of indifference which side is taken as universality and which as singularity. That is to say, inasmuch as the conditions are still the *inner*, *abstract* element of an actuality, they are the *universal*, and it is by *being held together* in one singularity that they step into actuality. Conversely, the conditions are a *dismembered and dispersed* appearance that gains *unity* and meaning, and a *universally valid existence*, only in *actuality*.

The relation that is here being assumed between the two sides of condition and conditioned may however also be taken to be one of cause and effect, ground and consequence. This is a matter of indifference here. The relation of condition, however, corresponds more closely to the one that obtains in the hypothetical judgment and syllogism inasmuch as condition is essentially an indifferent concrete existence, whereas ground and cause are inherently a transition; moreover, condition is a more universal condition in that it comprehends both sides of the relation, since effect, consequence, etc., are just as much the condition of cause and ground as these are the condition of them. –

Now A is the *mediating* being in so far as it is, *first*, an immediate being, an indifferent actuality, but, *second*, in so far as it is equally *inherently contingent*, self-sublating being. What translates the conditions into the actuality of the new shape of which they are the conditions is the fact that they are not being as an abstract immediacy, but *being according to its concept* – *becoming* in the first instance, but more determinedly (since the concept is no longer transition) *singularity* as self-referring *negative* unity. – The conditions are a dispersed material awaiting and requiring application; this *negativity* is the mediating means, the free unity of the concept. It determines itself as *activity*, for this middle term is the contradiction of *objective universality*, or of the totality of the identical content and *the indifferent immediacy*. – This middle term is no longer, therefore, merely inner but *existent necessity*; the objective universality contains its self-reference as *simple immediacy*, as *being*. In the categorical syllogism this moment is at first a determination of the extremes; but as against the objective universality of the middle term, it determines itself as *contingency*, hence as something which is only *posited* and also sublated, something that has returned into the concept or into the middle terms as unity, a unity which is now in its objectivity also being. **12.123**

The conclusion, "therefore B is," expresses the same contradiction – that B exists *immediately* but at the same time through an other or as *mediated*. According to its form, it is therefore the same concept that the middle term is, distinguished from *necessity* only as the *necessary*, in the totally superficial form of singularity as contrasted with universality. The absolute *content* of A and B is the same; for *ordinary representation*, they are two different names for the same basic thing, since representation fixes the appearances of the diversified shape of existence and distinguishes the necessary from its necessity; but to the extent that necessity were to be separated from B, the latter would not be the necessary. What we have here, therefore, is the identity of the *mediating term* and the *mediated*.

3. The hypothetical syllogism is the first to display *the necessary connection* as a connectedness through *form* or *negative unity*, just as the categorical syllogism displays it through positive unity, the solid *content*, the objective universality. But *necessity* merges with *the necessary*; *the form-activity* of translating the conditioning actuality into the conditioned is *in itself* the unity into which the determinacies of the oppositions previously let free into indifferent existence are *sublated*, and where the difference of A and B is an empty name. The unity is therefore a unity reflected into itself, and hence an *identical* content, and is this content not only *implicitly in itself* but, through this syllogism, it is also *posited*, for the being of A is also not its own being but that of B and *vice versa*, and in general the being of the one is the being of the other and, as determined in the conclusion, their immediate being or indifferent determinateness is a mediated one – therefore, their externality has been sublated, and what is *posited* is their *unity withdrawn into itself*.

The mediation of the syllogism has thereby determined itself as *singularity*, *immediacy*, and *self-referring negativity*, or as a differentiating identity that retrieves itself into itself out of this differentiation – as absolute form, and for that very reason as objective *universality*, self-identical existent *content*. In this determination, the syllogism is the *disjunctive syllogism*.

c. The disjunctive syllogism

As the hypothetical syllogism comes in general under the schema of the second figure of the formal syllogism, U-S-P, so the disjunctive comes under the schema of the third, S-U-P. The middle term, however, is a *universality replete with form*; it has determined itself as *totality*, as *developed*
12.124 objective universality. The middle term, therefore, is universality as well as particularity and singularity. As that universality, it is in the first place the substantial identity of the genus, but this identity is secondly one in which *particularity* is *included*, but again, included *as equal to it* – therefore as a universal sphere that contains its total particularity, the genus sorted out in its species, an A which is *B as well as C and D*. But particularization is differentiation and as such equally the *either-or* of B, C, D – *negative* unity, *the reciprocal* exclusion of the determinations. – This excluding, moreover, is now not just reciprocal, the determination not merely relative, but is also just as much *self-referring* determination, the particular as *singularity* to the exclusion of the *others*.

A is either B or C or D,
But A is B,
Therefore A is neither C nor D.

Or also:

A is either B or C or D,
But A is neither C nor D,
Therefore A is B.

A is subject not only in the two premises but also in the conclusion. It is a universal in the first premise and in its predicate the *universal* sphere particularized in the totality of its species; in the second premise, it is as *a determinate*, or as a species; in the conclusion it is posited as the excluding, *singular* determinateness. – Or again, in the minor it is already exclusive singularity, and in the conclusion it is positively posited as the determinate that it is.

Consequently, what as such appears to be meditated is the *universality* of A with the *singularity*. But the *mediating means* is this A which is the *universal* sphere of its particularizations and is determined as a *singular*. *What is posited in the disjunctive* syllogism is thus the truth of the hypothetical syllogism, the unity of the mediator and the mediated, and for that reason the disjunctive syllogism is equally no longer *a syllogism at all*. For the middle term which is posited in it as the totality of the concept itself contains the two extremes in their complete determinateness. The extremes, as distinct from this middle term, are only a positedness to which there no longer accrues any proper determinateness of its own as against the middle term.

If we consider the matter with narrower reference to the hypothetical syllogism, we find that there was in the latter a *substantial identity* as the *inner* bond of necessity, and a *negative unity* distinct from it, namely the activity or the form that translated one existence into another. The disjunctive syllogism is in general in the determination of *universality*, its middle **12.125**
term is the A as *genus* and as perfectly *determined*; also *posited* through this unity is the earlier inner content and, conversely, the positedness or the form is not the external negative unity over against an indifferent existence but is identical with that solid content. The whole form determination of the concept is posited in its determinate difference and at the same time in the simple identity of the concept.

In this way the *formalism of the syllogistic inference*, and consequently the subjectivity of the syllogism and of the concept in general, has sublated itself. This formal or subjective factor consisted in that the middle mediating the extremes is the concept as an *abstract* determination and is therefore *distinct* from the terms whose unity it is. In the completion of the syllogism, where the objective universality is equally posited as the totality

of the form determinations, the distinction of mediating and mediated has on the contrary fallen away. That which is mediated is itself an essential moment of what mediates it, and each moment is the totality of what is mediated.

The figures of the syllogism exhibit each determinateness of the concept *singly* as the middle term, a middle term which is at the same time the concept as an *ought*, the requirement that the mediating factor be the concept's totality. The different genera of the syllogism exhibit instead the stages in the *repletion* or concretion of the middle term. In the formal syllogism the middle is posited as totality only through all the determinacies, but each *singly*, discharging the function of mediation. In the syllogism of reflection, the middle term is the unity gathering together *externally* the determinations of the extremes. In the syllogism of necessity the middle has determined itself as a unity which is just as developed and total as it is simple, and the form of the syllogism, which consisted in the difference of the middle term over against its extremes, has thereby sublated itself.

With this the concept in general has been realized; more precisely, it has gained the kind of reality which is *objectivity*. The *first reality* was that the *concept*, in itself negative unity, partitions itself and as *judgment* posits its determinations in determinate and indifferent difference, and in the syllogism it then sets itself over against them. Since it is still in this way the inwardness of this now acquired externality, in the course of the syllogisms this externality is equated with the inner unity; the different determinations return into the latter through the mediation that unites them at first in a third term, and as a result the externality exhibits, in itself, the concept which, for its part, is no longer distinct from it as inner unity.

Conversely, however, that determinateness of the concept which was
12.126 considered as *reality* is equally a *positedness*. For the identity of the concept's inwardness and externality has been exhibited as the truth of the concept not only in this result; on the contrary, already in the judgment the moments of the concept remain, even in their reciprocal indifference, determinations that have significance only in their connection. The syllogism is *mediation*, the complete concept in its *positedness*. Its movement is the sublation of this mediation in which nothing is in and for itself, but each thing is only through the meditation of an other. The result is therefore an *immediacy* that has emerged through the *sublation of the mediation*, a *being* which is equally identical with mediation and is the concept that has restored itself out of, and in, its otherness. This *being* is therefore a *fact* which is *in and for itself – objectivity*.

SECTION II

Objectivity

12.127

In Book One of the Objective Logic, abstract *being* was presented as passing over into *existence*, but at the same time as retreating into *essence*. In Book Two, essence shows itself as determining itself as *ground*, thereby stepping into *concrete existence* and realizing itself as *substance*, but at the same time retreating into the *concept*. Of the concept, we have now first shown that it determines itself as *objectivity*. It should be obvious that this latter transition is essentially the same as the *proof* from the *concept*, that is to say, from the *concept of God* to his existence, that was formerly found in *Metaphysics*, or the so-called *ontological proof*. – Equally well known is that Descartes's sublimest thought, that God is that *whose concept includes his being within itself*,[1] after having degenerated into the bad form of the formal syllogism, namely into the form of the said proof, finally succumbed to the Critique of Reason and to the thought that *existence cannot be extracted from the concept*.[2] Some elucidations concerning this proof have already been made earlier. In Volume I, pp. 47 ff.,[3] where *being* has vanished into its closest opposite, *non-being*, and *becoming* has shown itself to be the truth of both, attention was called to the confusion that arises in the case of a determinate existence when we concentrate, not on its *being*, but on its *determinate content*, and then imagine – if we compare *this determinate content* (e.g. one hundred dollars) with another *determinate content* (e.g. the context of my perception, of my financial situation) and discover that it makes indeed a difference whether the one content is added to the other or not – that we are dealing with the distinction of being and non-being, or even the distinction of being and the concept. Further, in the same Volume

[1] See René Descartes, *Meditationes de prima philosophia* in *Oeuvres de Descartes*, Vol. 7, ed. Charles Adam and Paul Tannery (Paris: J. Vrin, 1964), pp. 66, 69; *Meditations on First Philosophy* in *The Philosophical Writings of Descartes*, Vol. 2, trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge: Cambridge University Press, 1984), 46, 47 (this English edition also uses the pagination of Adam and Tannery).

[2] A599/B627. [3] Cf. GW 11, 46ff.; above, 21.70ff.

on pp. 64ff. and on p. 289 of Volume II, the definition of *a sum-total of all reality* which occurs in the ontological proof was elucidated.[4] – But the essential subject matter of that proof, *the connectedness of concept and existence*, is the concern of the treatment of the *concept* just concluded and of
12.128 the entire course that the latter traverses in determining itself to *objectivity*. The concept, as absolutely self-identical negativity, is self-determining; it was noted that the concept, in resolving itself into *judgment* in singularity, already posits itself as *something real*, *an existent*; this still abstract reality completes itself in *objectivity*.

Now it might appear that the transition from the concept into objectivity is quite another thing than the transition from the concept of God to God's existence. But, on the one hand, it must be borne in mind that the determinate *content*, God, makes no difference in a logical progression, and that the ontological proof is only one application of this logical progression to that particular content. On the other hand, it is essential to be reminded of the remark made above[5] that the subject obtains determinateness and content only in its predicate; that prior to the predicate, whatever that content might otherwise be for feeling, intuition, and representation, so far as conceptual cognition is concerned it is only a *name*; but in the predicate, with determinateness, there begins at the same time the process of *realization* in general. – The predicates, however, must be grasped as themselves still confined within the concept, hence as something subjective with which no move to existence has yet been made; even for this reason, in judgment the *realization* of the concept is certainly not completed yet. But there is the further reason that the mere determination of a subject matter through predicates, without this determination being at the same time the realization and objectification of the concept, remains something so subjective that it is not even a true cognition and *determination of the concept* of the subject matter – "subjective" in the sense of abstract reflection and non-conceptual representation. – God as living God, and better still as absolute spirit, is only recognized in *what he does*. Humankind were directed early to recognize God in his *works*; only from these can the *determinations* proceed that can be called his *properties*, and in which his being is also contained. It is thus the conceptual comprehension of God's *activity*, that is to say, of God himself, that recognizes the *concept* of God in his *being* and his being in his concept. *Being* by itself, or even *existence*, are such a poor and restricted determination, that the difficulty of finding them in the concept may well be due to not having considered what *being* or *existence* themselves

[4] Cf. GW 11, 64–65, and above, 11.289, 21.74ff. [5] Cf. above, 12.54.

are. – *Being* as entirely *abstract*, *immediate self-reference*, is nothing but the abstract moment of the concept; it is its moment of abstract universality that also provides what is required of being, namely that it be *outside* the concept, for inasmuch as universality is a moment of the concept, it is also its difference or the abstract judgment wherein the concept opposes itself to itself. The concept, even as formal, already immediately contains *being* in a *truer* and *richer* form, in that, as self-referring negativity, it is *singularity*. **12.129**

But of course the difficulty of finding *being* in the concept in general, and equally so in the concept of God, becomes insuperable if we expect being to be something that we find *in the context of external experience* or *in the form of sense-perception*, like *the one hundred dollars in the context of my finances*, as something graspable only by hand, not by spirit, essentially visible to the external and not the internal eye; in other words, if the name of being, reality, truth, is given to that which things possess as sensuous, temporal, and perishable. – The consequence of a philosophizing that in regard to being fails to rise above the senses is that, in regard to the concept, it also fails to let go of merely abstract thought; such thought stands opposed to being.

The customary practice of regarding the concept as something just as one-sided as abstract thought will already stand in the way of accepting what has just been suggested, namely, that we regard the transition of the *concept of God* to his *being* as an *application* of the logical course of objectification of the concept presented above. Yet if it is granted, as it commonly is, that the logical element, as the formal element, constitutes the form for the cognition of every determinate content, then that application at least would have to be conceded, unless even at the opposition of concept and objectivity in general one stops short at the untrue concept and an equally untrue reality as an ultimate. – But in the exposition of *the pure concept* it was further indicated that the latter is the absolute divine concept itself.[6] In truth, therefore, what takes place is not a relation of *application* but the immediate display in the logical course of God's self-determination as being. But on this point it is to be remarked that inasmuch as the concept is to be presented as the concept of God, it ought be apprehended as it is when already taken up in the *idea*. The said pure concept passes through the finite forms of the judgment and the syllogism precisely because it is not yet posited in and for itself as one with objectivity, but is conceived rather only in the process of becoming that objectivity. The latter, too, is

[6] Cf. above, 12.24.

not yet the divine concrete existence, not yet the reality reflectively shining in the idea. And yet objectivity is just that much richer and higher than the *being or existence* of the ontological proof, as the pure concept is richer and higher than that metaphysical vacuum of the *sum-total* of all *reality*. – But I reserve for another occasion the task of elucidating in greater detail the manifold misunderstanding brought upon the ontological proof of God's existence, and also on the rest of the other so-called proofs, by logical formalism. We shall also elucidate Kant's critique of such proofs in order to establish their true meaning and thus restore the thoughts on which
12.130 they are based to their worth and dignity.[7]

We have previously called attention to the several forms of immediacy that have already come on the scene, but in different determinations.[8] In the sphere of being, immediacy is being itself and existence; in the sphere of essence, it is concrete existence and then actuality and substantiality; in the sphere of the concept, besides being immediacy as abstract universality, it is now objectivity. – These expressions, when the exactitude of philosophical conceptual distinctions is not at stake, may be used as synonymous; but the determinations are derived from the necessity of the concept. *Being* is as such the *first* immediacy, and *existence* is the same immediacy with a first determinateness. *Concrete existence*, along with the *thing*, is the immediacy that proceeds from *ground*, from the self-sublating mediation of the simple reflection of essence. But *actuality* and *substantiality* are the immediacy that proceeds from the sublated difference of the still unessential concrete existence as appearance and its essentiality. Finally, *objectivity* is the immediacy as which the concept has determined itself by the sublation of its abstraction and mediation. – It is the privilege of philosophy to choose such expressions from the language of ordinary life, which is made for the world of imaginary representations, as *seem to approximate* the determinations of the concept. There is no question of *demonstrating* for a *word* chosen from ordinary life that in ordinary life too the same concept is associated with that for which philosophy uses it, for ordinary life has no concepts, only representations of the imagination, and to recognize the concept in what is otherwise mere representation is philosophy itself. It must therefore suffice if representation, for those of its expressions that philosophy uses for its definitions, has only some rough approximation of their distinctive difference; it may also be the case that in these expressions one recognizes pictorial adumbrations which, as approximations, are close indeed to the corresponding concepts. – One will be hard pressed, perhaps, to concede

[7] Cf. *Encyclopedia* (1830), §51. [8] Cf. above, 11.324.

that something can *be* without *actually existing*; but at least nobody will mistake, for instance, *being* as the copula of the judgment for the expression "to exist actually," and nobody will say that "this article *exists* dear, suitable, etc.," "gold *exists* a metal or metallic," instead of "this article *is* dear, suitable, etc.," "gold *is* a metal."[r] And surely it is common to distinguish *being* from *appearing*, *appearance* from *actuality*, as also *being as contrasted to* actuality, **12.131** and still more all these expressions from *objectivity*. – But even if such expressions were used synonymously, philosophy would in any case have the freedom to take advantage of such empty superfluity of language for the purpose of its distinctions.

Mention was made in connection with the apodictic judgment – where judgment attains completion and the subject thus loses its determinateness as against the predicate – of the double meaning of *subjectivity* originating from it, namely the subjectivity of the concept and equally so of the externality and contingency confronting the concept.[9] A similar objectivity also appears for the double meaning, of standing *opposed to* the self-subsistent *concept* yet of also *existing in and for itself*.[10] In the former sense, the object stands opposed to the "I = I" which in subjective idealism is declared to be the absolute truth. It is then the manifold world in its immediate existence with which the "I" or the concept is engaged in endless struggle, in order, by the negation of the *inherently nullity* of this other, to give to its first certainty of being a self the *actual truth* of its equality with itself. – In a broader sense, it means a subject matter in general for whatever interest or activity of the subject.

In the opposite sense, however, the objective signifies *that which exists in and for itself*, without restriction and opposition. Rational principles, perfect works of art, etc., are said to be *objective* to the extent that they are free and above every accidentality. Although rational principles, whether theoretical or ethical, only belong to the sphere of the subjective, to consciousness, this aspect of the latter of existing in and for itself is nonetheless called objective; the cognition of truth is made to rest on the cognition of the object as free of any addition by subjective reflection, and right conduct on the adherence to objective laws, such as are not of subjective origin and

[r] In a French report in which the officer in command states that before making for land he would wait for the wind, which in the region of the island usually arose towards morning, we find the expression: "*le vent* ayant été *longtemps sans* exister"; here the distinction simply arises from the other common idiom as, for example, in "*il a été longtemps sans m'écrire*."

[9] Cf. above, 12.87.

[10] The allusion is to Fichte. Cf. *Grundlage der gesammten Wissenschaftslehre* (1794/95). English trans., pp. 95–96. GA I.2257–258, see especially point (5) in § 1.

are immune to arbitrariness and to treatment that would compromise their necessity.

At the present standpoint of our treatise, objectivity has the meaning first of all of the *being in and for itself* of the concept that has sublated the *mediation* posited in its self-determination, raising it to *immediate* self-reference. This immediacy is therefore itself immediately and entirely pervaded by the concept, just as its totality is immediately identical with its being. But further, since the concept equally has to restore the free being-for-itself of its subjectivity, it enters with respect to objectivity into a relation of *purpose* in which the immediacy of the objectivity becomes a negative for it, something to be determined through its activity. This immediacy thus acquires the other significance, namely that in and for
12.132 itself, in so far as it stands opposed to the concept, it is a nullity.

First, then, objectivity is in its immediacy. Its moments, on account of the totality of all moments, stand in self-subsistent indifference as *objects each outside the other*, and as so related they possess the *subjective unity* of the concept only as *inner* or as *outer*. This is *mechanism*.

But, *second*, inasmuch as in mechanism that unity reveals itself to be the *immanent* law of the objects, their relation becomes one of non-indifference, each *specifically* different according to law; a connection in which the objects' determinate self-subsistence is sublated. This is *chemism*.

Third, this essential unity of the objects is thereby posited as distinct from their self-subsistence. It is the subjective concept, but posited as referring in and for itself to the objectivity, as *purpose*. This is *teleology*.

Since purpose is the concept posited as within it referring to objectivity, and through itself sublating its defect of being subjective, the at first *external* purposiveness becomes, through the realization of the purpose, *internal*. It becomes *idea*.

CHAPTER I

Mechanism

12.133

Since objectivity is the totality of the concept that has returned into its unity, an immediate is thereby posited which is in and for itself that totality, and is also *posited* as such, but in it the negativity of the concept has as yet not detached itself from the immediacy of the totality; in other words, the objectivity is not yet posited as *judgment*. In so far as it has the concept immanent in it, the difference of the concept is present in it; but on account of the objective totality, the differentiated moments are *complete* and *self-subsistent objects* that, consequently, even in connection relate to one another as *each standing on its* own, each maintaining itself in every combination as *external*. – This is what constitutes the character of *mechanism*, namely, that whatever the connection that obtains between the things combined, the connection remains one that is *alien* to them, that does not affect their nature, and even when a reflective semblance of unity is associated with it, the connection remains nothing more than *composition*, *mixture*, *aggregate*, etc. *Spiritual* mechanism, like its *material* counterpart, also consists in the things connected in the spirit remaining external to one another and to spirit. A *mechanical mode of representation*, a *mechanical memory*, a *habit*, a *mechanical mode of acting*, mean that the pervasive presence that is proper to spirit is lacking in what spirit grasps or does. Although its theoretical or practical mechanism cannot take place without its spontaneous activity, without an impulse and consciousness, the freedom of individuality is still lacking in it, and since this freedom does not appear in it, the mechanical act appears as a merely external one.

A. THE MECHANICAL OBJECT

The object is, as we have seen, the *syllogism* whose mediation has attained equilibrium and has therefore come *to be* immediate identity. It is therefore in and for itself a universal – universality, not in the sense of a commonality **12.134**

of properties, but a universality that pervades particularity and in it is immediate singularity.

1. To begin with, therefore, the object does not differentiate itself into *matter* and *form*, matter being its presumed self-subsistent universal aspect and form the particular and singular instead; according to its concept, any such abstract differentiation of singularity and universality has no place in the object; if regarded as matter, the object must then be taken to be in itself informed matter. One can just as well take it as a thing with properties, as a whole consisting of parts, as substance with accidents, or as determined by the other relations of reflection. But these are all past relations that in the concept have come to an end. The object, therefore, has neither properties nor accidents, for these are separable from the thing or the substance, whereas in the object particularity is absolutely reflected into the totality. In the parts of a whole, there is indeed present that self-subsistence that pertains to the differences of the object, but these differences are at once themselves essentially objects, totalities which, unlike parts, are not such as against the whole.

At first, therefore, the object is *indeterminate*, for it has no determinate opposition within, because it is the mediation that has collapsed into immediate identity. Inasmuch as the *concept* is *essentially determined*, the object has in it the determinateness of a *manifold* which, although complete, is otherwise *indeterminate*, that is, *relationless*, one that constitutes a totality also not further determined at first; *sides* or *parts* that may be distinguished within it belong to an external reflection. This totally indeterminate difference thus amounts just to this, that there are *several objects*, each of which only contains its determinateness reflected into its universality and does not reflectively shine *outwardly*. – Because this indeterminate determinateness is essential to the object, the object is in itself a *plurality*, and must therefore be regarded as a *composite*, an *aggregate*. – Yet it does not consist of *atoms*, for atoms are not objects because they are not totalities. Leibniz's *monad* would be more of an object. It is a total representation of the world which, shut up within its *intensive subjectivity*, in essence at least is supposed to be a *one*. Yet the monad, determined as an *exclusive one*, is a principle only *assumed* by *reflection*. It is an object, however, both because the ground of its manifold representations – of the developed, that is, the *posited* determinations of its merely *implicit* totality – lies *outside it*, and because it is equally a matter of indifference for the monad that it constitutes an object *together with other objects*; in fact, therefore, it is not
12.135 *exclusive*, not *self-determined for itself*.

2. Since the object is now a totality of *determinateness*, yet, because of its indeterminateness and immediacy, it is not the totality's *negative unity*,

it is *indifferent* towards the *determinations* as *singulars*, determined in and for themselves, just as these are themselves *indifferent* to each other. These, therefore, are not comprehensible from it nor from one another; the object's totality is the form of the overall reflectedness of its manifoldness into a singularity in general which is not in itself determinate. The determinacies, therefore, which are in it do indeed pertain to it; but the *form* that constitutes their difference and combines them into a unity is an external one, indifferent to them; whether it be a *mixture*, or again an *order*, a certain *arrangement* of parts and sides, these are combinations that are indifferent to what they connect.

Consequently, like an existence in general, the object has the determinateness of its totality *outside it*, in *other* objects, and these again *outside them*, and so forth to infinity. The immanent turning back of this progression *in infinitum* must indeed be likewise assumed, and it must be represented as a *totality*, as a *world*, but one which is nothing but a universality brought to closure through a singularity that remains indeterminate, a *universe*.

Since the object is thus determinate yet indifferent to its determinateness, through itself it points for its determinateness *outside and beyond* itself, constantly to objects for which it is however likewise *a matter of indifference that they do the determining*. Consequently, nowhere is a principle of self-determination to be found. *Determinism*, which is the standpoint that cognition adopts when it assumes as truth the object as we first have it here, assigns for each determination of the object that of another object; but this other object is likewise indifferent both to its determinateness and its determining. – For this reason determinism is itself so indeterminate as to be bound to an infinite progression; it can halt at will anywhere, and be satisfied there, because the object to which it has progressed, being a formal totality, is shut up within itself and indifferent to its being determined by another. For this reason to *explain* the determination of an object, and to this end to extend the representation of it beyond it, is only an *empty word*, for there is no self-determination in the other object to which the explanation has been extended.

3. Now since the *determinateness* of an object *lies in an other*, there is no determinate diversity separating the two; the determinateness is merely *doubled*, once in the one object and then again in the other; it is something utterly *identical* and the explanation or comprehension is, therefore, a *tautology*. This tautology is an external back and forth movement; since the determinateness fails to obtain from objects that are indifferent to it any proper differentiation and is therefore only identical, there is only *one determinateness* at hand, and that it should be doubled only expresses **12.136**

precisely the externality and vacuity of a difference. But the objects are at the same time *self-subsistent* in regard to one another; in that identity, therefore, they remain utterly *external*. – Thus there arises the contradiction of a perfect *indifference* of objects to one another and of an *identity of determinateness* of such objects, or of the objects' perfect *externality* in the *identity* of their determinateness. This contradiction is consequently the *negative unity* of a plurality of objects reciprocally repelling each other in the unity. This is the *mechanical process*.

B. THE MECHANICAL PROCESS

If objects are regarded only as self-enclosed totalities, they cannot act on one another. Regarded in this way, they are the same as the *monads* which, precisely for that reason, were thought of as having no influence on each other. But the concept of a monad is for just this reason a deficient reflection. For, *in the first place*, the monad is a *determinate* representation of its only *implicit* totality; as a *certain degree* of development and *positedness* of its representation of the world, it is *determinate*; but since it is a self-enclosed totality, it is also indifferent to this determinateness and is, therefore, not its own determinateness but a determinateness *posited through another object*. *In second place*, it is an *immediate* in general, for it is supposed to be just *a mirroring*;[11] its self-reference is therefore *abstract universality* and hence an *existence open to others*. – It does not suffice, in order to gain the freedom of substance, to represent the latter as a totality that, *complete in itself*, would have nothing to receive *from the outside*. On the contrary, a self-reference that grasps nothing conceptually but is only a mirroring[11] is precisely a *passivity* towards the other. – Likewise the *determinateness*, whether we now take it as the determinateness of a being that *exists* or that *mirrors*,[11] as a *degree* of the monad's own internally generated development, is *something external*; the *degree* that the development achieves has its limit in an other. To project the reciprocal influence of substances into a *predetermined harmony* means nothing more than to make it a presupposition, in effect to remove it from the scope of the concept. – The need to avoid the *interaction* of substances was founded on the moment of absolute *self-subsistence* and *originariness* which was made a fundamental assumption. But since
12.137 the *positedness*, the degree of development, does not correspond to this assumed *in-itselfness*, it has for this reason its ground in an *other*.

[11] *vorstellendes.*

In connection with the relation of substantiality, we showed that it passes over into the relation of causality.[12] But now the existent no longer has the determination of a substance but that of an *object*; the causal relation has come to an end in the concept; the originariness of one substance *vis-à-vis* another has shown itself to be a reflective shine, the substance's action a transition into the opposite substance. This relation has therefore no objectivity. Hence in so far as one object is posited in the form of subjective unity, as efficient cause, this no longer counts as an *originary* determination but as something *mediated*; the active object has this determination only by means of another object. – *Mechanism*, since it belongs to the sphere of the concept, has that posited within it which proved to be the truth of the relation of causality, namely, that the cause which is supposed to be something existing in and for itself is in fact effect just as well, positedness. In mechanism, therefore, the originary causality of the object is immediately a non-originariness; the object is indifferent to this determination attributed to it; that it is a cause is therefore something accidental to it. – To this extent, it can be said that the causality of substances is *only the product of representation*. But precisely this causality as product of representation is what *mechanism* is; for mechanism is this, that causality, as *identical* determinateness of a diversity of substances and hence as the foundering into this identity of their self-subsistence, is *mere positedness*; the objects are indifferent to this unity and maintain themselves in the face of it. But this also, their indifferent *self-subsistence*, is a mere *positedness*, and for this reason they are capable of *mixing* and *aggregating*, *and as an* aggregate of becoming *one object*. Through this indifference both to their transition and to their self-subsistence, the substances are *objects*.

a. The formal mechanical process

The mechanical process is the positing of that which is contained in the concept of mechanism, hence the positing in the first place of a *contradiction*.

1. It follows from the just indicated concept that the interaction of objects is the *positing* of their identical connection. This positing consists simply in giving to the determinateness which is generated the form of *universality* – and this is *communication*, which occurs without transition into the opposite. – *Spiritual communication*, which however takes place in an element of universality in the form of universality, is an *idealized* connection for itself, one in which *a determinateness continues* undisturbed from **12.138**

[12] Cf. above, 11.396.

one person to another, generalizing itself unaltered – like a scent freely spreading in the unresisting atmosphere. But also in the communication between material objects does their determinateness *widen*, so to speak, in an equally idealizing manner; personality is an infinitely more intensive *hardness* than objects possess. The formal totality of an object in general – a totality indifferent to determinateness and hence not a self-determination – renders the object indistinct from another object and thus makes interaction at first an unimpeded continuing of the determinateness of the one into the other.

Now in the region of the spirit there is an infinitely manifold content capable of communication, for by being taken up into intelligence the content receives this *form* of universality in which it becomes communicable. But that which is a universal not only by virtue of form, but in and for itself, is the *objective* as such, both in the region of the spirit and of the body, and as against it the singularity of external objects, as of persons also, is an unessential factor unable to offer any resistance to it. Laws, morals, rational conceptions in general, are in the region of the spirit communicable entities of this kind; they pervade individuals unconsciously imposing themselves on them. In the region of the body, such entities are motion, heat, magnetism, electricity, and the like, all of which, even when one wants to imagine them as stuffs or materials, must be termed as *imponderable* agents, for they lack that aspect of materiality that grounds *its singularization*.

2. Now although in the interaction of objects their *identical* universality is posited first, it is equally necessary to posit the other moment of the concept, that of *particularity*; the objects thus also demonstrate their *self-subsistence*; they hold themselves outside each other, and in that universality they produce *singularity*. This production is *reaction* in general. To begin with, this reaction is not to be conceived of as a *mere sublation* of action and of the communicated determinateness; what is communicated is as universal positively present in the particular objects and *particularizes itself* only in their diversity. To this extent, therefore, what is communicated remains what it is, only *distributed* among the objects or determined by their particularity. – The cause gets lost in its other, in the effect; the activity of the causal substance in its action; but the *active object* only becomes a *universal*; its action is from the start not a loss of its determinateness but a *particularization* by virtue of which the object, which was at first that
12.139 whole *determinateness* present in it as *single*, now becomes a *species* of it, and the *determinateness* is thereby posited for the first time as a universal. The two – the raising in communication of the singular determinateness into

universality; and the particularization of it in distribution, the reduction of what was only a one to a species – are one and the same.

Now *reaction* is equal to *action*. – *First*, this is manifested by the other object *taking over* the entire universal; and so it is now active against the first. Thus its reaction is the same as the action, a *reciprocal repulsion* of the *impulse*. *Second*, what is communicated is the objective; it therefore *remains* the substantial determination of the object on the presupposition of their diversity; the universal thus at the same time specifies itself in them, and consequently each object does not simply give back the whole action but possesses its specific share. But, *third*, reaction is a *wholly negative action* in so far as each object, because of the *elasticity of its self-subsistence*, repels within it the positedness of an other and retains its self-reference. The specific *particularity* of the determinateness communicated in the objects, what was before called species, returns to *singularity*, and the object asserts its externality as against the *communicated universality*. The action thereby passes over into *rest*. It proves to be only a *superficial*, transient alteration within the self-enclosed indifferent totality of the object.

3. This return constitutes the *product* of the mechanical process. *Immediately*, the object is *presupposed* as a singular; then as a particular as against another particular; but finally as indifferent towards its particularity, as universal. The *product* is the totality of the concept previously *presupposed* but now *posited*. It is the conclusion in which the communicated universal is united with singularity through the particularity of the object. In rest, however, the *mediation* is posited at the same time as *sublated*; or again, what is posited is that the product is indifferent to this determining of it and that the received determinateness is external in it.

Accordingly the product is the same as the object that first enters the process. But at the same time that object is first *determined* through this movement; the mechanical object is, *as such*, *an object only as product*, for what it *is*, is only *by virtue of the mediation of an other* in it. It is as product that it thus is what it was supposed to be in and for itself, a *composite*, a *mixture*, a certain *arrangement* of parts, in general such that its determinateness is not self-determination but something *posited*.

Yet the *result* of the mechanical process is *not already there ahead of that process itself*; its *end is not* in its beginning, as in the case of purpose. The product is in the object a determinateness which is *externally* posited in **12.140**
it. Hence this product is indeed according to its *concept* the same as what the object already is at the beginning. But at the beginning the external determinateness is not yet there as *posited*. The result is therefore *something*

quite other than the first existence of the object, and is something utterly accidental for it.

b. The real mechanical process

The mechanical process passes over into *rest*. That is to say, the determinateness that the object obtains through that process is only an *external* one. Just as external to it is this rest, for although the latter is a determinateness opposed to the *activity* of the object, the two are each indifferent to the object. Rest can also be viewed, therefore, as brought about by an *external cause*, just as much as it was indifferent to the object to be active.

Now further, since the determinateness is a *posited* one, and the concept of the object has *gone back to itself through the process of mediation*, the object contains the determinateness as one that is reflected into itself. Hence in the mechanical process the objects and the process itself now have a more closely determined relation. They are not merely diverse, but are *determinedly differentiated* as against one another. Consequently the result of the formal process, on the one hand a determinationless rest, is, on the other hand, through the immanently reflected determinateness, the *distribution* among several objects mechanically relating to one another *of the opposition* which is in the object as such. The object that on the one hand lacks all determination, showing *no elasticity* and *no self-subsistence* in its relations, has, on the other hand, a *self-subsistence impenetrable* to other objects. Objects now have also *as against one another* this more determined opposition of the *self-subsistent singularity* and *the non-self-subsistent universality*. – The precise difference between any two may be had merely *quantitatively as a difference* in a body of diverse magnitudes of *mass*, or of *intensity*, or in various other ways. But in general the difference cannot be fixed at just this abstract level; also as objects, both are *positively* self-subsistent.

Now the first moment of this real *process* is, as before, *communication*. The *weaker* can be seized and invaded by the *stronger* only in so far as it accepts the stronger and constitutes one *sphere* with it. Just as in the material realm the weaker is secured against the disproportionately strong (as a sheet hanging freely in the air is not penetrated by a musket ball; a weak organic receptivity is not as vulnerable to strong stimuli as it is to
12.141 weak), so is the wholly feeble spirit safer facing the strong than one who stands closer to the strong. Imagine, if you will, someone dull-witted and ignoble; lofty intelligence will make no impression on such a one, nor will nobility. The one single effective defense *against* reason is not to get

involved with it at all. – To the extent that an object that has no standing of its own is unable to make contact with one which is self-subsistent, and no communication can take place between them, the latter is also unable to offer *resistance*, that is, cannot specify the communicated universal for itself. – If they were not in the same sphere, their mutual connection would be an infinite judgment and no process would be possible between them.

Resistance is the precise moment of the overpowering of the one object by the other, for it is the initial moment in the distribution of the communicated universal and in the positing of the self-referring negativity, of the singularity to be established. Resistance is *overpowered* when its determinateness is not *commensurate* to the communicated universal which the object has accepted and which is supposed to be singularized in the latter. The object's relative lack of self-subsistence is manifested in the fact that its *singularity* lacks the *capacity for what is communicated* to it and is therefore shattered by it, for it is unable to constitute itself as *subject* in this universal, cannot make the latter its *predicate*. – *Violence* against an object is for the latter *something alien* only according to this second aspect. *Power* becomes *violence* when power, an objective universality, is *identical* with the *nature* of the object, yet its determinateness or negativity is not the object's own immanent *negative reflection* according to which the object is a singular. In so far as the negativity of the object is not reflected back into itself in the power, and the latter is not the object's own self-reference, the negativity, as against the power, is only *abstract* negativity whose manifestation is extinction.

Power, as *objective universality* and as *violence against the object* is what is called *fate* – a concept that falls within mechanism in so far as fate is called *blind*, that is, its *objective universality* is not recognized by the subject in its own specific sphere. – To add a few more remarks on the subject, the fate of a living thing is in general the *genus*, for the genus manifests itself through the fleetingness of the living individuals that do not possess it as genus in their *actual singularity*. Merely animate natures, as mere objects, like other things at lower levels on the scale of being, do not have fate. What befalls them is a contingency; however, *in their concept as objects* they are *self-external*; hence the alien power of fate is simply and solely their *own immediate nature*, externality and contingency itself. Only self-consciousness has fate in a strict sense, because it is *free*, and therefore in the *singularity* of its "I" it absolutely exists *in and for itself* and can oppose itself **12.142**
to its objective universality and *alienate* itself from it. By this separation, however, it excites against itself the mechanical relation of a fate. Hence, for the latter to have violent power over it, it must have given itself some

determinateness or other over against the essential universality; it must have committed a *deed*. Self-consciousness has thereby made itself into a *particular*, and this existence, like abstract universality, is at the same time the side open to the communication of its alienated essence; it is from this side that it is drawn into the process. A people without deeds is without blame; it is wrapped up in objective, ethical universality, is dissolved into it, is without the individuality that moves the unmoved, that gives itself a determinateness on the outside and an abstract universality separated from the objective universality; yet in this individuality the subject is also divested of its essence, becomes an *object* and enters into the relation of *externality* towards its nature, into that of mechanism.

c. The product of the mechanical process

The product of *formal* mechanism is the object in general, an indifferent totality in which *determinateness* is as *posited*. The object has hereby entered the process as *a determinate thing*, and, in the extinction of this process, the result is, on the one hand, *rest*, the original formalism of the object, the negativity of its determinateness-for-itself. But, on the other hand, it is the sublation of the determinateness, the *positive reflection* of it into itself, the determinateness that has withdrawn into itself, or the *posited totality of the concept*, the *true singularity* of the object. The object, determined at first in its indeterminate universality, then as *particular*, is now determined as an *objective singular*, so that in it that *reflective semblance of singularity*, which is only a self-subsistence *opposing* itself to the substantial universality, is sublated.

This resulting immanent reflection, the objective oneness of the objects, is now a oneness which is an individual self-subsistence – the *center*. Secondly, the reflection of negativity is the universality which is not a fate standing over against determinateness, but a rational fate, immanently determined – a universality that *particularizes itself from within*, the difference that remains at rest and fixed in the unstable particularity of the objects and their process; it is the *law*. This result is the truth, and consequently
12.143 also the foundation, of the mechanical process.

C. ABSOLUTE MECHANISM

a. The center

The empty manifoldness of the object is now gathered first into objective singularity, into the simple self-determining *middle point*. Secondly,

in so far as the object retains as an immediate totality its indifference to determinateness, the latter too is present in it as unessential or as an *outside-one-another* of many objects. As against this immediate totality, the prior or the essential determinateness constitutes the *real middle term* between the many interacting objects; it unites them *in and for themselves* and is their objective universality. Universality exhibited itself first in the relation of *communication*, as present only through *positing*; as *objective* universality, however, it is the pervading immanent essence of the objects.

In the material *world* it is the *central body* which is the *genus* or rather the *individualized* universality of the single objects and their mechanical process. The unessential single bodies relate to one another by *impact* and *pressure*; this kind of relation does not hold between the central body and the objects of which it is the essence; for their externality no longer constitutes their fundamental determination. Hence their identity with the central body is rather rest, namely the *being at their center*; this unity is their concept existing in and for itself. It nevertheless remains only an *ought*, since the objects' externality, still posited at the same time, does not conform to that unity. The *striving* which the objects consequently have towards the center is their absolute universality, one which is not posited through *communication*; it constitutes the true *rest*, itself *concrete* and not *posited from the outside*, into which the process of instability must find its way back. – It is for this reason an empty abstraction to assume in mechanics that a body set in motion would go on moving in a straight line to infinity if it did not lose movement because of external resistance. *Friction*, or whatever other form resistance takes, is only a phenomenon of *centrality*; it is the latter that in principle brings the body back to itself, since that against which the body rubs and incurs friction has its power of resistance only because it is united with the center. – In things *spiritual* the center, and the union with it, assume higher forms; but the unity of the concept and the reality of that unity, which is here in a first instance mechanical centrality, must **12.144** there too constitute the fundamental determination.

The central body has therefore ceased to be a mere *object*, for in the latter the determinateness is something unessential, whereas now the central body no longer has only *being-in-itself*, *in-itselfness*, but also has the *being-for-itself* of the objective totality. For this reason it can be regarded as an *individual*. Its determinateness is essentially different from a mere *order* or *arrangement* and *external combination* of diverse parts; as a determinateness that exists in and for itself it is an *immanent* form, a self-determining principle to which the objects inhere and in virtue of which they are bound together in a true One.

But this central individual is at first only a *middle term* that as yet has no true extremes; as the negative unity of the total concept it dirempts itself rather into such extremes. Or again: the previously non-self-subsistent, self-external objects become likewise determined as individuals by the retreat of the concept; the self-identity of the central body, still a *striving*, is burdened by an *externality* to which, in being taken up into the body's *objective singularity*, the latter is communicated. The objects, through this centrality of their own, are positioned outside the original center and are themselves centers for the non-self-subsistent objects. These second centers and the non-self-subsistent objects are brought into unity by the absolute middle term.

But the relative individual centers themselves also constitute the middle term of *a second syllogism*. This middle term is on the one hand subsumed under a higher extreme, the objective *universality* and *power* of the absolute center; on the other hand, it subsumes under it the non-self-subsistent objects whose superficiality and formal singularization it supports. – These non-self-subsistent objects are in turn the middle term of a *third syllogism*, *the formal syllogism*, for since the central individuality obtains through them the externality by virtue of which, in *referring to itself*, is also *strives* towards an absolute middle point, those non-self-subsistent objects are the link between absolute and relative central individuality. The formal objects have for their essence the identical *gravity* of their immediate central body in which they inhere as in their subject and the extreme of singularity; through the externality which they constitute, this immediate central body is subsumed under the absolute central body; they therefore are the formal middle term of *particularity*. – But the absolute individual is the objectively universal middle term that brings into unity and holds firm the inwardness of the relative individual and its externality. – Similarly, the *government*, the
12.145 *individual citizens*, and the *needs* or the *external life* of these, are also three terms, of which each is the middle term of the other two. The *government* is the absolute center in which the extreme of the singulars is united with their external existence; the *singulars* are likewise the middle term that incites that universal individual into external concrete existence and transposes their ethical essence into the extreme of actuality. The third syllogism is the formal syllogism, the syllogism of reflective shine in which the singular citizens are tied by their *needs* and external existence to this universal absolute individuality; this is a syllogism that, as merely subjective, passes over into the others and has its truth in them.

This totality, whose moments are themselves the completed relations of the concept, the *syllogisms* in which each of the three different objects runs

through the determination of the middle term and the extreme, constitutes *free mechanism*. In it the different objects have objective universality for their fundamental determination, the *pervasive* gravity that persists self-identical in the *particularization*. The connections of *pressure*, *impact*, *attraction*, and the like, as also of *aggregations* or *mixtures*, belong to the relation of externality which is at the basis of the third of the three syllogisms. *Order*, which is the merely external determinateness of the objects, has passed over into immanent and objective determination. This is the *law*.

b. The law

In law, the more specific difference of the *idealized reality of objectivity* versus the *external reality* comes into view. The object, as the *immediate* totality of the concept, does not yet possess an externality differentiated from the concept, and the latter is not posited for itself. Now that through the mediation of the process the object has withdrawn into itself, there has arisen the opposition of *simple centrality* as against an *externality* now determined *as* externality, that is, one *posited* as not existing in and for itself. That moment of identity or idealization of individuality is, on account of the reference to externality, an *ought*; it is the unity of the concept, determined in-and-for-itself and self-determining, to which that external reality does not correspond, and therefore does not go past the mere *striving* towards it. But individuality is, *in and for itself*, *the concrete principle of negative unity*, and as such is itself *totality*; it is a unity that dirempts itself into the *specific differences of the concept* while abiding within its self-equal universality; it is thus the central point *expanded* inside its pure ideality *by* **12.146**
difference. – This reality that corresponds to the concept is the *idealized* reality, distinct from the reality that is only a striving; it is difference, earlier a plurality of objects but now in its essential nature, and taken up into pure universality. This real ideality is the *soul* of the hitherto developed objective totality, *the identity of the system which is now determined in and for itself*.

The objective *being-in-and-for-itself* thus manifests itself more precisely in its totality as the negative unity of the center, a unity that divides into *subjective individuality* and *external objectivity*, maintains the former in the latter and determines it in an idealized difference. This self-determining unity that absolutely reduces external objectivity to ideality is a principle of *self-movement*; the *determinateness* of this animating principle, which is the difference of the concept itself, is the *law*. – Dead mechanism was the mechanical process of objects above considered that immediately

appeared as self-subsisting, but precisely for that reason are in truth non-self-subsistent and have their center outside them; this process that passes over into *rest* exhibits either *contingency* and indeterminate difference or *formal uniformity*. This uniformity is indeed a *rule*, but not *law*. Only free mechanism has a *law*, the determination proper to pure individuality or to *the concept existing for itself*. As difference, the law is in itself the inexhaustible source of a self-igniting fire and, since in the ideality of its difference it refers only to itself, it is *free necessity*.

c. Transition of mechanism

This soul is however still immersed in its body. The *now determined* but *inner* concept of objective totality is free necessity in the sense that the law has not yet stepped in opposite its object; it is *concrete* centrality as a universality *immediately* diffused in its objectivity. Such an ideality does not have, therefore, the *objects themselves* for its determinate difference; these are *self-subsistent individuals* of the totality, or also, if we look back at the formal stage, non-individual, external *objects*. The law is indeed immanent in them and it does constitute their nature and power; but its difference is shut up in its ideality and the objects are not themselves differentiated in the idealized non-indifference of the law. But the object
12.147 possesses its essential self-subsistence solely in the idealized centrality and its laws; it has no power, therefore, to put up resistance to the judgment of the concept and to maintain itself in abstract, indeterminate self-subsistence and remoteness. Because of the idealized difference which is immanent in it, its existence is a *determinateness posited by the concept*. Its lack of self-subsistence is thus no longer just a *striving* towards a *middle point*, with respect to which, precisely because its connection with it is only that of a striving, it still has the appearance of a self-subsistent external object; it is rather a striving towards the *object determinedly opposed to it*; and likewise the center has itself for that reason fallen apart and its negativity has passed over into *objectified opposition*. Centrality, therefore, is now the reciprocally negative and tense *connection* of these objectivities. Thus free mechanism determines itself to chemism.

CHAPTER 2

Chemism

12.148

In objectivity as a whole chemism constitutes the moment of judgment, of the difference that has become objective, and of process. Since it already begins with determinateness and positedness, and the chemical object is at the same time objective totality, the course it follows next is simple and perfectly determined by its presupposition.

A. THE CHEMICAL OBJECT

The chemical object is distinguished from the mechanical in that the latter is a totality indifferent to determinateness, whereas in the chemical object the determinateness, and hence the *reference to other*, and the mode and manner of this reference, belong to its nature. – This determinateness is at the same time essentially a *particularization*, that is, it is taken up into universality; thus it is a *principle* – a *determinateness which is universal*, not only the determinateness of the *one singular object* but also of the *other*. In the chemical object there is now, therefore, a distinction in its concept, between the inner totality of the two determinacies and the determinateness that constitutes the nature of the singular object in its *externality* and *concrete existence*. Since in this way the object is *implicitly* the whole concept, it has within it the *necessity* and the *impulse* to sublate its opposed, *one-sided subsistence*, and to bring itself in existence to the *real whole* which it is according to its concept.

Regarding the expression "chemism" for the said relation of the non-indifference of objectivity, it may be further remarked that the expression is not to be understood here as though the relation were only to be found in that form of elemental nature that strictly goes by that name. Already the meteorological relation must be regarded as a process whose parts have more the nature of physical than chemical elements.[13] In animate things,

[13] This is a strange sentence. One would expect Hegel to say the opposite, namely that the meteorological relation already is more chemical than physical.

12.149 the sex relation falls under this schema, and the schema also constitutes the *formal* basis for the spiritual relations of love, friendship, and the like.

On closer examination, the chemical object is at first a *self-subsistent* totality in general, one reflected into itself and therefore distinct from its reflectedness outwards – an indifferent *basis*, the individual not yet determined as non-indifferent; the person, too, is in the first instance a basis of this kind, one that refers only to itself. But the immanent determinateness that constitutes the object's *non-indifference* is, *first*, reflected into itself in such a manner that this retraction of the reference outwards is only a formal abstract universality; the outwards reference is thus a determination of the object's immediacy and concrete existence. From this side the object does not return, *within it*, to individual totality: the negative unity has its two moments of opposition in *two particular objects*. Accordingly, a chemical object is not comprehensible from itself, and the being of one object is the being of another. – But, *second*, the determinateness is absolutely reflected into itself and is the concrete moment of the individual concept of the whole which is the universal essence, the *real genus* of the particular objects. The chemical object, which is thus the contradiction of its immediate positedness and its immanent individual concept, is a *striving* to sublate the immediate determinateness of its existence and to give concrete existence to the objective totality of the concept. Hence it does still remain a non-self-subsistent object, but in such a way that it is by nature in tension with this lack of self-subsistence and initiates the *process* as a self-determining.

B. THE PROCESS

1. It begins with the presupposition that the objects in tension, as much as they are tensed against themselves, just as much are they by that very fact at first tensed against each other – a relation which is called their *affinity*. Each stands through its concept in contradiction to its concrete existence's own one-sidedness and each consequently strives to sublate it, and in this there is immediately posited the striving to sublate the one-sidedness of the other and, through this reciprocal balancing and combining, to posit a reality conformable to the concept that contains both moments.

Since each is posited within it as self-contradictory and self-sublating, they are held apart from each other and from their reciprocal complementation only by *external violent force*. The middle term whereby these extremes are now concluded into a unity is, *first*, the *implicitly existent* nature of both, the whole concept containing both within. But, *second*, since in concrete
12.150 existence the two stand over against each other, their absolute unity is also a

still formal element that concretely *exists distinc*t from them – the element of *communication* wherein they enter into external *community* with each other. Since the real difference belongs to the extremes, this middle term is only the abstract neutrality, the real possibility of those extremes – the *theoretical element*, as it were, of the concrete existence of the chemical objects, of their process and its result. In the realm of bodies, *water* fulfills the function of this medium; in that of spirit, inasmuch as there is in it an analog of such a relation, the *sign* in general, and *language* more specifically, can be regarded as fulfilling it.

The relation of the objects, as mere communication in this element, is on the one hand a tranquil coming-together, but on the other it is equally a *negative relating*, for in communication the concrete concept which is their nature is posited in reality, and the *real differences* of the object are thereby reduced to its unity. Their prior self-subsistent determinateness is thus sublated in the union that conforms to the concept, which is one and the same in both; their opposition and tension are thereby blunted, with the result that in this reciprocal complementation the striving attains its tranquil *neutrality*.

The process is in this way *dissolved*; since the contradiction between concept and reality has been resolved, the extremes of the syllogism have consequently lost their opposition and have ceased to be extremes as against each other and the middle term. The product is *something neutral*, that is, something in which the ingredients, which can no longer be called objects, are no longer in tension and therefore no longer have the properties that accrued to them in tension, though in the product the *capacity* for their prior self-subsistence and tension is retained. For the negative unity of the neutral product proceeds from a *presupposed non-indifference*; the *determinateness* of the chemical object is identical with its objectivity; it is original. Through the process just considered, this non-indifference is only *immediately* sublated; the determinateness, therefore, is not as yet absolutely reflected into itself, and consequently the product of the process is only a formal unity.

2. In this product the tension of opposition, and the negative unity which is the activity of the process, are now indeed dissolved. But since this unity is essential to the concept and has also itself come into concrete existence, it is still present but has stepped *outside* the neutral object. The process does not spontaneously re-start itself, for it had non-indifference only as its *presupposition* – it did not posit it. – This self-subsistent negativity outside the object, the concrete existence of the *abstract* singularity whose being-for-itself has its reality in the *non-indifferent object*, is in itself now in

12.151 tension with its abstraction, an inherently restless activity outwardly bent on consuming. It connects *immediately* with the object whose tranquil neutrality is the real possibility of an opposition to this neutrality; the same object is now the *middle term* of the prior formal neutrality, now concrete in itself and determined.

The more precise immediate connection of the *extreme of negative unity* with the object is in that the latter is determined by it and is thereby disrupted. This disruption may at first be regarded as the restoration of the opposition of the objects in tension with which chemism began. But this determination does not constitute the other extreme of the syllogism but belongs to the immediate connection of the differentiating principle with the middle in which this principle gives itself its immediate reality; it is the determinateness which the middle term, besides at the same time being the universal nature of the subject matter, possesses in the disjunctive syllogism, whereby that object is both objective universality and determinate particularity. The *other extreme* of the syllogism stands opposed to the external *self-subsistent extreme* of singularity; it is, therefore, the equally self-subsisting extreme of *universality*; hence the disruption that the real neutrality of the middle term undergoes in it is that it breaks up into moments that are not non-indifferent but, on the contrary, *neutral*.[14] Accordingly these moments are, on the one side, the abstract and indifferent[15] *base*, and, on the other, this base's *activating* principle which, separated from it, equally attains the form of indifferent objectivity.

This disjunctive syllogism is the totality of chemism in which the same objective whole is exhibited as self-standing *negative* unity; then, in the middle term, as *real* unity; and finally as the chemical reality resolved into its *abstract* moments. In these moments the determinateness has not reached its *immanent reflection* in *an other* as in the neutral product, but has in itself returned into its abstraction, an *originally determined element*.

3. These elemental objects are therefore liberated from chemical tension; in them, the original basis of that *presupposition* with which chemism began has been *posited* through the real process. Now further, their inner *determinateness* is as such essentially the contradiction of their *simple indifferent subsistence* and themselves as *determinateness*, and is the outward impulse that disrupts itself and posits tension in its determined object and in an *other*, *in order that the object may have something* to which it can relate as non-indifferent, with which it can neutralize itself and give to its simple

[14] *indifferente.* [15] *gleichgültige.*

determinateness an existent reality. Consequently, on the one hand chemism has gone back to its beginning in which objects in a state of **12.152** reciprocal tension seek one another and then combine in a neutral product by means of a formal and external middle term; and, on the other hand, by thus going back to its *concept*, chemism sublates itself and has gone over into a higher sphere.

C. TRANSITION OF CHEMISM

Even ordinary chemistry shows examples of chemical alterations in which a body, for example, imparts a higher oxidation to one part of its mass and thereby reduces another part to a lower degree of the same, at which degree alone it can enter into a neutral combination with another differing body brought into contact with it, a combination to which it would not have been receptive at that other first immediate degree. What happens here is that the object does not connect with another in accordance with an immediate, one-sided determinateness, but, in accordance with the inner totality of an original *relation*, *posits the presupposition* which it needs for a real connection and thereby gives itself a middle term by virtue of which it unites its concept with its reality in conclusion; it is a singularity determined in and for itself, the concrete concept as the principle of the *disjunction* into extremes whose *re-union* is the activity of that *same* negative principle that thereby returns to its first determination, but returns to it *objectified*.

Chemism is itself *the first negation of the indifferent* objectivity and of the *externality* of determinateness; it is still burdened, therefore, by the immediate self-subsistence of the object and with externality. Consequently it is not yet for itself that totality of self-determination that proceeds from it and in which it is rather sublated. – The three syllogisms that have resulted constitute its totality. The first has formal neutrality for its middle term and for extremes the objects in tension. The second has for its middle term the product of the first, real neutrality; and for extremes the disrupting activity and its product, the indifferent element. But the third is the self-realizing concept that posits for itself the presupposition by virtue of which the process of its realization is conditioned – a syllogism that has the universal for its essence. Yet, on account of the immediacy and externality by which the chemical objectivity is still determined, *these three syllogisms fall apart*. The first process whose product is the neutrality of the tensed objects is extinguished in this product and is re-activated only by a differentiation that comes to it from outside; conditioned by an immediate presupposition, **12.153** the process is exhausted in it. – The excretion out of the neutral product

of the non-indifferent extremes, as also their decomposition into their abstract elements, must likewise proceed from *conditions* and stimulations of activity brought in from the outside. But the two essential moments of the process, neutralization on the one hand and dissolution and reduction on the other, since they too are bound together in one and the same process and the *union* blunting the tension of the extremes is also a *separation* into these, constitute on account of the still underlying externality *two diverse* sides; the extremes that are separated in that same process are other than the objects or matters uniting in it; in so far as the former proceed from it again as non-indifferent, they must turn outwards; their renewed neutralization is a process other than the one that took place in the first.

But these various processes, which have demonstrated themselves to be necessary, are equally so many *stages* by which *externality* and *conditionality* are sublated, and from which the concept emerges as determined in and for itself, a totality unconditioned by externality. In the first process, what is sublated is the externality of the mutually non-indifferent extremes that constitute the whole reality, or the distinction between the *implicitly* determinate concept and its *existing* determinateness. Sublated in the second process is the externality of the real unity, union as merely *neutral*. Or more precisely, the formal activity sublates itself in bases that are equally formal, neutral[16] determinacies whose *inner concept* is now the absolute activity that has withdrawn into itself and now realizes itself internally, that is, *posits* the determinate difference within itself and through this *mediation* constitutes itself as real unity; this is a mediation which is thus the concept's own mediation, its self-determination and, considering that in it the concept reflects itself back into itself, an immanent *presupposing*. The third syllogism, which on the one hand is the restoration of the preceding processes, sublates on the other hand the last remaining moment of *indifferent* bases: it sublates the whole abstract external *immediacy* that becomes in this way the concept's own moment of self-mediation. The concept that has thus sublated as external all the moments of its objective existence, and has posited them in its simple unity, is thereby completely liberated from the objective externality to which it refers only as an unessential reality. This objective free concept is *purpose*.

[16] *indifferente.*

CHAPTER 3

Teleology

12.154

Where there is the perception of a *purposiveness*, an *intelligence* is assumed as its author; required for purpose is thus the concept's own free concrete existence. *Teleology* is above all contrasted with *mechanism*, in which the determinateness posited in the object, being external, is one that gives no sign of *self-determination*. The opposition between *causæ efficientes* and *causæ finales*, between merely *efficient* and *final causes*, refers to this distinction, just as, at a more concrete level, the enquiry whether the absolute essence of the world is to be conceived as blind mechanism or as an intelligence that determines itself in accordance with purposes also comes down to it. The antinomy of *fatalism*, along with *determinism*, and *freedom* is equally concerned with the opposition of mechanism and teleology; for the free is the concept in its concrete existence.

Earlier metaphysics has dealt with these concepts as it dealt with others. It presupposed a certain picture of the world and strived to show that one or the other concept of causality was adequate to it, and the opposite defective because not *explainable* from the presupposed picture, all the while not examining the concept of mechanical cause and that of purpose to see which possesses truth *in and for itself*. If this is established independently, it may turn out that the objective world exhibits mechanical and final causes; its actual existence is not the norm of *what is true*, but *what is true* is rather the criterion for deciding which of these concrete existences is its true one. Just as the subjective understanding exhibits also errors in it, so the objective world exhibits also aspects and stages of truth that by themselves are still one-sided, incomplete, and only relations of appearances. If mechanism and purposiveness stand opposed to each other, then by that very fact they cannot be taken as *indifferent* concepts, as if each were by itself a correct concept and had as much validity as the other, the only question being *where* the one or the other may apply. This equal validity of the two rests only on the fact that they *are*, that is to say, that we *have them both*. But since they do stand opposed, the necessary first question is, which of the

two concepts is the true one; and the higher and truly telling question is,
12.155 *whether there is a third which is their truth, or whether one of them is the truth of the other*. – But *purposive connection* has proved to be the truth of *mechanism*. – Regarding *chemism*, what came under it can be taken together with *mechanism*, for purpose is the concept in free concrete existence, and the concept's state of unfreedom, its being sunk into externality, stands opposed to it in any form. Both, mechanism as well as chemism, are therefore included under natural necessity: mechanism, because in it the concept does not exist in the object concretely, for as mechanical the latter lacks self-determination; chemism, either because the concept has in it a one-sided concrete existence in a state of tension, or because, emerging as the unity that creates in the neutral object a tension of extremes, it is external to itself in so far as it sublates this divide.

The closer the teleological principle is associated with the concept of an *extra-mundane* intelligence, and the more it has therefore enjoyed the favor of piety, all the more it has seemed to depart from the true investigation of nature, which aims at a cognition of the properties of nature not as extraneous, but as immanent *determinacies*, and accepts only such cognition as a valid conceptual comprehension. Since purpose is the concept itself in its concrete existence, it may seem strange that a cognition of objects based on their concept rather appears as an unjustified trespass into a *heterogeneous* element, whereas mechanism, for which the determinateness of an object is posited in it externally and by an other, is accepted as a more *immanent* view of things than teleology. Of course mechanism, at least the ordinary unfree mechanism, and chemism as well, must be regarded as an immanent principle in so far as the *externally* determining object is itself *again just another such object*, externally determined and indifferent to its being determined, or, in the case of chemism, in so far as the other object must likewise be one that is chemically determined; in general, in so far as an essential moment of the totality always lies in something external. These principles remain confined, therefore, within the same natural form of finitude; but although they do not wish to transcend the finite and, as regards appearances, lead only to finite causes that themselves demand further causes, they nonetheless equally expand themselves, partly into a formal totality in the concept of force, cause, or of such determinations of reflection that are supposed to signify *originariness*, and partly, through the medium of abstract universality, also into a *sum total of forces*, a *whole* of reciprocal causes. Mechanism thus reveals itself to be a striving for totality by the very fact that it seeks to comprehend nature *by itself* as a *whole* that

has no need of an other for *its* concept – a totality that is not found in purpose and the extra-mundane intelligence associated with it. **12.156**

Now purposiveness presents itself from the first as something of a generally *higher nature*, as an *intelligence* that *externally* determines the manifoldness of objects *through a unity that exists in and for itself*, so that the indifferent determinacies of the objects become *essential by virtue of this connection*. In mechanism they become so through the *mere form of necessity* that leaves their *content* indifferent, for they are supposed to remain external and only the understanding as such is expected to find satisfaction by recognizing its principle of union, the abstract identity. In teleology, on the contrary, the content becomes important, for teleology presupposes a concept, *something determined in and for itself* and consequently self-determining, and has therefore extracted from the *connection* of differences and their reciprocal determinateness, from the *form*, a *unity that is reflected into itself*, *something that is determined in and for itself* and is consequently *a content*. But if this content is otherwise *finite* and insignificant, then it contradicts what it is supposed to be, for according to its form purpose is a *totality* infinite within itself – especially when the activity operating in accordance with it is assumed to be an *absolute* will and intelligence. For this reason has teleology drawn the reproach of triviality so much upon itself, for the purposes that it has espoused are, as the case may be, more important or more trivial [than the content], and it was inevitable that the connection of purposiveness in objects would so often appear just a frivolity, since it appears external and therefore contingent. Mechanism, on the contrary, leaves to the determinacies of the objects, as regards their content, their status as accidents indifferent to the object, and these determinacies are not supposed to have, whether for the objects or the subjective understanding, any value higher than that. This principle, combined with external necessity, yields therefore a consciousness of infinite freedom that contrasts with teleology, which sets up as something absolute bits of its content that are trivial and even contemptible, where the more universal thought can only find itself infinitely constricted, even to the point of feeling disgust.

The formal disadvantage from which this teleology immediately suffers is that it only goes as far as *external purposiveness*. The content of concept, since the latter is thereby posited as something formal, is for teleology also externally given to it in the manifoldness of the objective world – in those very determinacies that are also the content of mechanism, but are there as something external and accidental. Because of this commonality of content,

12.157 only the *form of purposiveness* constitutes by itself the essential element of the teleological. In this respect, without as yet considering the distinction between external and internal purposiveness, the connection of purpose in general has proven itself to be the *truth of mechanism*. – Teleology possesses in general the higher principle, the concept in its concrete existence, which is in and for itself the infinite and absolute – a principle of freedom which, utterly certain of its self-determination, is absolutely withdrawn from the *external determining* of mechanism.

One of Kant's greatest services to philosophy was in drawing the distinction between relative or *external* purposiveness and *internal* purposiveness; in the latter he opened up the concept of *life*, the *idea*, and with that he *positively* raised philosophy above the determinations of reflection and the relative world of metaphysics, something that the *Critique of Reason* does only imperfectly, ambiguously, and only *negatively*. – We have remarked that the opposition of teleology and mechanism is first of all the general opposition of *freedom* and *necessity*.[17] Kant treated the opposition in this form, among the *antinomies* of reason, namely, as the *third conflict of the transcendental ideas*.[18] – I cite his exposition, to which reference was made earlier,[19] very briefly because its essential point is so simple that it does not need extensive explanation – and moreover, the peculiarities of Kant's antinomies have been elucidated in greater detail elsewhere.

The *thesis* of the antinomy now in question runs thus: Causality according to the laws of nature is not the only one from which the appearance of the world can exhaustively be derived. For their explanation, it is necessary to assume yet another causality through freedom.

The *antithesis*: There is no freedom, but everything in the world happens solely according to laws of nature.

As in the other antinomies, the proof starts off apagogically by assuming the opposite of each thesis; secondly, in order to show the contradiction of this assumption, its opposite – which is then the proposition to be proved – is assumed in turn and presupposed as valid. This whole roundabout proof could therefore be spared, for the proof consists in nothing but the assertoric assertion of the two opposite propositions.

Thus to prove the thesis we should first assume that there is *no other causality* than that according to the *laws of nature*, that is, according to the necessity of mechanism in general, chemism being included. This
12.158 proposition contradicts itself, because the law of nature consists just in this, that nothing happens *without a cause sufficiently determined a priori*, a

[17] Cf. above, 12.154. [18] A472/B472ff. [19] Cf. GW 11, 114–120; above, 21.179–189.

cause that would have to contain an absolute spontaneity within it, that is, the assumption opposed to the thesis is contradictory, for the reason that it contradicts the thesis.

In support of the proof *of the antithesis we should* assume that there is a *freedom* as a particular kind of causality for absolutely initiating a situation, and together with it also a series of consequences following upon it. But now, since such a beginning *presupposes* a situation that has *no causal link* with the one preceding it, it contradicts *the law of causality* that alone makes the unity of experience and experience in general possible – that is, the assumption of the freedom that is opposed to the antithesis cannot be made, for the reason that it contradicts the antithesis.

We find in essence the same antinomy in the *Critique of the Teleological Judgement* as the opposition between the proposition that *every generation of material things* happens *according to merely mechanical laws*, and the proposition that *some cases of generation of material things are not possible according to such laws*.[20] – Kant's resolution of this antinomy is the same as the general resolution of the rest, namely that reason cannot prove either the one or the other proposition because we cannot have *a priori any determining principle* of the possibility of things according to merely empirical laws of nature; further, that therefore the two propositions must be regarded not as *objective propositions* but *as subjective maxims*; that *I* ought to *reflect* on the events of nature every time according to the principle of the mechanism of nature alone, but that this does not prevent, *when occasion permits*, *following up* certain natural forms in accordance with *another maxim*, namely in accordance with the principal of final causes – as if now these *two maxims*, which moreover are supposed to be necessary only for *human reason*, did not stand in the same opposition as the two *propositions* in antinomy. – Missing in all this, as we remarked above,[21] is the one thing that alone is of philosophical interest, namely the investigation of which of the two principles has truth in and for itself. On this standpoint, it makes no difference whether the principles should be regarded as *objective*, which means here, as externally existing determinations of nature, or as mere *maxims* of a *subjective* cognition; what is subjective here is rather the contingent cognition that applies one or the other maxim as *occasion demands*, indeed, according to whether it deems them fitting for given objects, but for the rest does not ask about the *truth* of these determinations themselves, whether they both are determinations of the objects or of cognition. **12.159**

[20] *Critique of Judgement*, §70. [21] Cf. above, 12.154.

However unsatisfactory is for this reason Kant's discussion of the teleological principle with respect to its essential viewpoint, still worthy of note is the place that Kant assigns to it. Since he ascribes it to a *reflective faculty of judgment*, he makes it into a *mediating link* between the *universal of reason* and the *singular of intuition*;[22] further, he distinguishes this *reflective judgment* from the *determining judgment*, the latter one that merely *subsumes* the particular under the universal.[23] Such a universal that only *subsumes* is an *abstraction* that becomes *concrete* only in an *other*, in the particular. Purpose, on the contrary, is the *concrete universal* containing within itself the moment of particularity and of externality; it is therefore active and the impulse to repel itself from itself. The concept, as purpose, is of course an *objective judgment* in which one determination, the subject, namely the concrete concept, is self-determined, while the other is not only a predicate but external objectivity. But for that reason the connection of purpose is not a *reflective judgment* that considers external objects only according to a unity, *as though* an intelligence had given them to us *for the convenience of our faculty of cognition*; on the contrary, it is the truth that exists in and for itself and judges *objectively*, determining the external objectivity absolutely. The connection of purpose is therefore more than *judgment*; it is the *syllogism* of the self-subsistent free concept that through objectivity unites itself with itself in conclusion.

Purpose has resulted as the *third* to mechanism and chemism; it is their truth. Inasmuch as it still stands inside the sphere of objectivity or of the immediacy of the total concept, it is still affected by externality as such and has an objective world over against it to which it refers. From this side, mechanical causality, to which chemism is also in general to be added, still makes its appearance in this *purposive connection* which is the *external one*, but as *subordinated* to it and as sublated in and for itself. As regards the more precise relation, the mechanical object is, as immediate totality, indifferent to its being determined and consequently, conversely, to its being a determinant. This external determinateness has now progressed to self-determination and accordingly the concept that in the object was only *inner* or, which amounts to the same, only *outer*, is now *posited*; purpose is, in the first instance, precisely this concept which is external to the mechanical object. And so for chemism also, purpose is the self-determining which brings the external determinateness conditioning it back to the unity of the concept. – We have here the nature of the subordination of the two preceding forms of the objective process. The other, which in those forms

[22] *Critique of Judgement*, §61, AK 5.360. [23] *Critique of Judgement*, AK 5.179.

lies in the infinite progress, is the concept posited at first as external to them, and this is purpose; not only is the concept their substance but externality **12.160**
is for them also an essential moment constituting their determinateness. Thus mechanical or chemical technique, because of its character of being externally determined, naturally offers itself to the connection of purpose, which we must now examine more closely.

A. THE SUBJECTIVE PURPOSE

In the *centrality* of the objective sphere, which is an indifference to determinateness, the *subjective* concept has first rediscovered and posited the *negative point of unity*, and in chemism it has first rediscovered and posited the objectivity of the *determinations of the concept* by which it is first posited as *concrete objective concept*. Its determinateness or its simple difference now has the *determinateness of externality* within it, and its simple unity is therefore the unity that repels itself from itself and in this repelling maintains itself. Purpose, therefore, is the subjective concept as an essential striving and impulse to posit itself externally. In this, it is exempt from transition. It is neither a force expressing itself, nor a substance or a cause manifesting itself in its accidents or effects. To the extent that force has not expressed itself, it is only an abstract inner; or again, it first has existence in an externalization to which it has to be solicited. The same applies to cause and to substance. Since they have actuality only in the accidents and in the effects, their activity is a transition against which they do not maintain themselves in freedom. Purpose can of course also be defined as a force or a cause, but these expressions cover only an incomplete side of its signification; if they are to be said of purpose according to its truth, this can be done only in a way that sublates their concept – as a cause that solicits itself to expression, or a cause that is a cause of itself or whose effect is immediately the cause.

When purposiveness is attributed to an *intelligence*, as was said above,[24] this is done with specific reference to a certain content. But, as such, purpose is to be taken as the *rational in its concrete existence*. It manifests *rationality* by being the concrete concept that holds the *objective difference in its absolute unity*. Within, therefore, it is essentially *syllogism*. It is the self-equal *universal*; more precisely, inasmuch as it contains self-repelling negativity, it is universal though at first still *indeterminate activity*. But since this activity is negative self-reference, it *determines* itself immediately and **12.161**
gives itself the moment of *particularity*, and this particularity, as likewise

[24] Cf. above, 12.154, 155.

the totality of the form reflected into itself, is *content as against the posited* differences of the form. The same negativity, through its self-reference, is just as immediately the reflection of the form into itself and *singularity*. From the one side, this *reflection* is the *inner universality of the subject*; from the other side, however, it is *outwards reflection*; and to this extent purpose is still something subjective, its activity still directed to an external objectivity.

For purpose is the concept that has come to itself in objectivity; the determinateness that it has given itself there is that of *objective indifference* and *externality* of determinateness; its self-repelling negativity is therefore one whose moments, being only determinations of the concept itself, also have the form of objective indifference to one another. – Already in the formal *judgment* are *subject* and *predicate* determined as self-subsistent over against each other; but their self-subsistence is still only abstract universality. It has now attained the determination of *objectivity*, but, as a moment of the concept, this complete difference is enclosed within the simple unity of the concept. Now in so far as purpose is this total *reflection* of objectivity *into itself* and is such *immediately*, *in the first place*, the self-determination or the particularity as *simple* reflection into itself is distinguished from the *concrete* form, and is a *determinate content*. Accordingly, purpose is *finite*, even though according to form it is equally infinite subjectivity. *Secondly*, since its determinateness has the form of objective indifference, it has the shape of a *presupposition*, and from this side its finitude consists in its having before it an *objective*, mechanical and chemical world to which its activity is directed as to something *already there*; its self-determining activity is in its identity thus immediately *external to itself*, reflection into itself just as much as reflection outwards. To this extent purpose still has a truly *extra-mundane* concrete existence – to the extent, namely, that this objectivity stands opposed to it, just as the latter, as a mechanical and chemical whole still not determined and not pervaded by purpose, stands on its side opposed to it.

Consequently, the movement of purpose can now be expressed as being directed at sublating its *presupposition*, that is, the immediacy of the object, and at *positing* it as determined by the concept. This negative relating to the object is equally a negative attitude towards itself, a sublating of the
12.162 subjectivity of purpose. Positively, this is the realization of purpose, namely the unification of the objective being with it, so that this being, which as a moment of purpose is immediately the determinateness identical with it, shall be as *external determinateness*, and conversely the objective, as *presupposition*, shall be *posited* rather as determined by the concept. – Purpose

is in it the impulse to its realization; the determinateness of the moments of the concept is externality; the *simplicity* of these moments within the unity of the concept is however incommensurable with what this unity is, and the concept therefore repels itself from itself. This repulsion is in general the *resolution*[25] of the self-reference of the negative unity by virtue of which the latter is *exclusive*[26] singularity; but by this *excluding*[27] the unity resolves itself, that is to say, it discloses itself,[28] for it is *self-determination*, the positing of *itself*. On the one hand, in determining itself, subjectivity makes itself into particularity, gives itself a content which, enclosed within the unity of the concept, is still an inner content; but this *positing*, the simple reflection into itself, is, as we have seen,[29] at the same time immediately a *presupposing*; and at the same moment in which the subject of purpose determines *itself*, it is referred to an indifferent, external objectivity which is to be made equal by it with the determinateness of that inner content, that is to say, posited as something *determined by the concept* – first of all as *means*.

B. THE MEANS

The first immediate positing in purpose is equally the positing of something *internally* determined, that is, determined as *posited*, and, at the same time, the presupposing of an objective world, one indifferent to the determination of purpose. But the subjectivity of purpose is the *absolutely negative unity*; *its second* determining is, therefore, the sublation of this presupposition as such; this sublation is an *immanent turning back* inasmuch as that moment of the *first negation* which is the positing of the negative over against the subject, the external object, is sublated by it. But as against the presupposition or the immediacy of the determining, as against the objective world, it is as yet only the *first*, itself immediate and hence external negation. This positing is therefore not yet the realized purpose itself but only the *beginning* of this realization. The object so determined is now the *means*.

Through a means the purpose unites with objectivity and in objectivity unites with itself. This means is the middle term of the syllogism. Purpose is **12.163**
in need of a means for its realization, because it is finite – in need of a means, that is to say, of a middle term that has at the same time the shape of an *external* existence indifferent towards the purpose itself and its realization. The absolute concept has mediation within itself in such a manner that the

[25] *Entschluß.* [26] *auschliessende.* [27] *Ausschliessen.* [28] *schließt auf.* [29] Cf. above, 11.251.

first positing of it is not a presupposition in whose object the fundamental determination would be an indifferent externality; on the contrary, the world as creation has only the form of such an externality; it is its negativity and the positedness that rather constitute its fundamental determination. – Accordingly, the finitude of purpose consists in this, that its determining is as such external to itself; accordingly, its first determining, as we have seen,[30] falls apart into a supposing and a presupposing; the *negation* of this determining is therefore only according to one side already immanent reflection; according to the other side, it is rather only *first* negation. Or again, the immanent reflection is itself also self-external and a reflection outwards.

The means is therefore the *formal* middle term of a *formal* syllogism; it is something *external* to the *extreme* of the subjective purpose as also, therefore, to the extreme of the objective purpose; just as particularity in the formal syllogism is an indifferent *medius terminus* that can be replaced by others. Moreover, just as this particularity is a middle term by virtue of being determinateness with reference to one extreme but universality with reference to the other extreme, and therefore obtains its mediating determination by being related to an other, so too the means is a mediating middle term only because it is, first, an immediate object, and, second, because it is a means by virtue of a reference connecting it with the extreme of purpose external to it – a reference which is for it a form to which it is indifferent.

Concept and objectivity, therefore, are in the means only externally linked; hence the means is only a merely *mechanical object*. The reference of the object to purpose is a premise or the immediate reference which, as we have seen,[31] is with respect to purpose an *immanent reflection*; the means is an inhering predicate; its objectivity is subsumed under the determination of purpose which, on account of its concreteness, is universality. Through this purposive determination present in it, the means is now also subsumptive with respect to the other extreme, the at the moment still indeterminate objectivity. – Conversely, as contrasted with the subjective purpose, the means has as *immediate objectivity a universality of existence* which the subjective singularity of purpose still misses. – Thus, since purpose is in the means as only an external determinateness at first, it is itself, as the negative unity, outside the means; the means, for its part, is a mechanical object that possesses purpose only as a determinateness, not as the simple concretion of totality. But as the unifying means, the middle

[30] Cf. above, 12.161. [31] Cf. above, 12.161.

term must itself be the totality of the purpose. It has been shown that the determination of purpose is in the middle term at the same time immanent **12.164** reflection;[32] as this reflection, it is a *formal* self-reference, since the *determinateness* is posited as *real indifference*, as the *objectivity* of the middle term. But precisely for this reason this subjectivity, which is in one respect pure subjectivity, is at the same time also *activity*. – In the subjective purpose the negative self-reference is still identical with determinateness as such, with the content and the externality. However, in the initial objectification of purpose which is a becoming-other of the simple concept, those moments come apart, each outside the other, or, conversely, the becoming-other or the externality itself consists in this coming apart.

This whole middle term is thus the totality of the syllogism in which the abstract activity and the external means constitute the extremes, while the determinateness of the object through the purpose, by virtue of which it is a means, constitutes the middle term. – But further, *universality* is the *connection* of purposiveness and the means. This means is object, *in itself* the totality of the concept; it does not have with respect to purpose any of the power of resistance that it initially has against another immediate object. To the purpose, therefore, which is the posited concept, it is utterly penetrable, and it is receptive to this communication because it is *in itself* identical with it. But it is now also *posited* that it is penetrable by the concept, for in centrality it is an object striving towards negative unity; in chemism, too, whether as neutral or non-indifferent, it is no longer self-subsistent. – Its non-self-subsistence consists precisely in its being the totality of the concept only *implicitly*; but the concept is being-for-itself. Consequently, with respect to purpose the object has the character of being powerless and of serving it; purpose is the subjectivity or soul of the object that has in the latter its external side.

The object, *immediately* subjected to purpose in this way, is not an extreme of the syllogism; on the contrary, this connection between the two constitutes a premise of it. But the means has also one side from which it still has self-subsistence as against the purpose. The objectivity which in the means is bound with the purpose is still external to it, because it is only immediately so connected; and therefore the *presupposition* still persists. The activity of the purpose through the means is for that reason still directed against this presupposition, and the purpose is activity, no longer mere impulse and striving, because in the means the moment of

[32] Cf. above, 12.162.

objectivity is posited in its determinateness as something external, and the
12.165 simple unity of the concept now has this objectivity *as such* within it.

c. the realized purpose[33]

1. Purpose is in its connection to the means already reflected into itself, but its *objective* immanent turning back is not yet posited. The activity of purpose through its means is still directed against objectivity as an initial presupposition; this is precisely what that activity is, to be indifferent to determinateness. If it were again to consist in determining the immediate objectivity, the product would again be only a means, and so forth into infinity; only a purposeful means would result, but not the objectivity of the purpose itself. In being active in its means, therefore, purpose must not determine the immediate object *as something external* to it, and the object, accordingly, must merge with it in the unity of the concept through itself; or again, the otherwise external activity of purpose through its means must determine itself *as mediation* and thus sublate itself as external.

The connection of the activity of purpose with the external object through the means is first of all the *second premise* of the syllogism – an *immediate* connection of the middle term with the other extreme. It is *immediate* because the middle term has within it an external object and the other extreme is likewise an external object. The means is effective and potent against this latter object because its own is linked with the self-determining activity, whereas for the other the immediate determinateness that it possesses is an indifferent one. Their process in this connection is none other than the mechanical or chemical one; the previous relations come up again in this objective externality, but under the dominance of purpose. – But these processes, as they themselves showed, return into purpose on their own.[34] If, therefore, the connection of the means to the external object which it has to work upon is at first an immediate one, that connection has earlier exhibited itself already as a syllogism, for purpose proved to be their true middle term and unity. Since the means is therefore the object that stands on the side of purpose and has the latter's activity within it, the mechanism that occurs here is at the same time the turning back of objectivity into itself, into the concept which, however, is already presupposed as purpose; the negative attitude of the purposeful activity

[33] *Der ausgeführte Zwecke*: the purpose as carried out or executed. I use "realized" for the sake of simplicity, and Hegel occasionally also uses *realisiert*.

[34] Cf. above, 12.153.

towards the object is therefore not an *external* attitude but, on the contrary, the objectivity's own alteration and internal transition into it.

That the purpose immediately refers to an object and makes it into a means, as also that through this means it determines another object, may be regarded as *violence* inasmuch as purpose appears of an entirely different nature than the object, and the two objects are in like matter **12.166** mutually independent totalities. But that the purpose posits itself in a *mediate* connection with the object, and *between* itself and this object *inserts* another object, may be regarded as the *cunning* of reason. As remarked, the finitude of rationality has this side, that purpose relates to the object as a presupposition, that is, as external. In an *immediate connection* with that object, purpose would itself enter into the sphere of mechanism and chemism and would therefore be subject to accidentality and to the loss of its determining vocation[35] to be the concept that exists in and for itself. But in this way, by sending an object as a means ahead of it, it lets it do the slavish work of externality in its stead, abandons it to the wear and tear while preserving itself behind it against mechanical violence.

Since it is finite, the purpose further has a finite content; accordingly, it is not *rational* absolutely, or simply in and for itself. But the *means* is the external middle term of the syllogism which is the realization of purpose; in the means, therefore, the rationality in the purpose manifests itself as such by maintaining itself in *this external other*, and precisely *through* this externality. To this extent the *means* is higher than the *finite purposes* of *external* purposiveness: the *plough* is more honorable than are immediately the enjoyments which it procures and which are the purposes. The *tool* lasts while the immediate enjoyments pass away and are forgotten. It is in their tools that human beings possess power over external nature, even though with respect to their purposes they are subjected to it.

But the purpose does not just keep outside the mechanical process; on the contrary, it keeps itself in it and is its determination. For purpose – as the concept that concretely exists freely over against the object and its process, and is self-determining activity – since it is equally the truth of mechanism existing in and for itself, in the latter only rejoins itself. The power of purpose over the object is this identity existing for itself, and its activity is the manifestation of this identity. The purpose as *content* is the determinateness as it exists in and for itself, present in the object as indifferent and external; but the activity of the purpose is the *truth* of the process on the one side, and, as negative unity, the *sublation of the reflective*

[35] *Bestimmung.*

shine of externality. The indifferent determinateness of the object is one that can *abstractly* be replaced by another just as externally; but the truth of the simple *abstraction* of the determinateness is the totality of the negative, the concrete concept that posits the externality within itself.

The content of the purpose is its negativity as *simple determinateness reflected into itself*, distinguished from its totality as form. On account of this *simplicity*, the determinateness of which is in and for itself the totality of the concept, the content appears as that which *remains identical* in the
12.167 realization of the purpose. The teleological process is the *translation* of the concept that concretely exists distinctly as concept into objectivity; as we see, this translation into a presupposed other is the rejoining of the concept *through itself with itself*. The content of the purpose is now this identity concretely existing in the form of the identical. In every transition the concept maintains itself; for instance, when the cause comes to effect, it is the cause that in the effect only comes to itself. But in the teleological transition, what maintains itself is the concept that as such already concretely exists *as cause*, as the *free* concrete unity as against objectivity and its external determinateness. The externality into which the purpose translates itself is, as we have seen,[36] itself already posited as a moment of the concept, as the form of its inner differentiation. In the externality, therefore, the purpose has *its own moment*; and the content, as the content of the concrete unity, is its *simple form* that does not remain in its different moments only *implicitly* equal with itself (as subjective purpose, as means and mediating activity, and as objective purpose) but also exists concretely as abidingly self-equal.

Of the teleological activity one can say, therefore, that in it the end is the beginning, the consequence the ground, the effect the cause; that it is a becoming of what has become; that in it only that which already concretely exists comes into existence, and so on; that is to say, that quite in general all the relation determinations that belong to the sphere of reflection or of immediate being have lost their distinction, and what, like end, consequence, effect, and so on, is spoken of as an *other*, no longer has in purpose this determination of other, but is rather posited as identical with the simple concept.

2. If we now examine the product of teleological activity more closely, we see that purpose comes to it only externally if we take it as an absolute presupposition over against a purpose which is subjective, that is to say, in so far as we stop short at a purposive activity that relates to the object

[36] Cf. above, 12.165.

through its means only mechanically, positing in place of one indifferent determinateness of the object an *other* which is just as external to it. A determinateness such as an object possesses through purpose differs in general from one which is merely mechanical in that it is a moment of a *unity* and consequently, although external to the object, is yet not in itself something merely external. The object that exhibits such a unity is a whole with respect to which its parts, its own externality, are indifferent; it is a determinate, *concrete* unity that unites different connections and determinacies within itself. This unity, which cannot be comprehended from the specific nature of the object and, as regards determinate content, is of another content than the object's own, is *for itself* not a mechanical **12.168**
determinateness, yet still is in the object mechanically. Just as in this product of purposive activity the content of the purpose and the content of the object are external to each other, so too do the determinations in the other moments of the syllogism relate to each other externally – in the connecting middle, the purposive activity and the object which is the means; and in the subjective purpose, which is the other extreme, the infinite form as totality of the concept and the content of the concept. According to the *connection* by which the subjective purpose is syllogistically united with objectivity, both premises are an immediate connection – namely the connection of the object determined as middle term with the still external object, and the connection of the subjective purpose with the object made into means. The syllogism is therefore affected by the deficiency of the formal syllogism in general, namely that the connections in which it consists are not themselves conclusions or mediations but already presuppose the conclusion for the production of which they are supposed to serve as means.

If we consider the one *premise*, that of the immediate connection of the subjective purpose and the object that thereby becomes a means, then the purpose cannot connect with the object immediately, for the latter is just as immediate as the object of the other extreme in which the purpose is to be realized *through mediation*. Since the two are thus posited as *diverse*, a means for their connection must be interjected between this objectivity and the subjective purpose; but such a means is equally an object already determined by purpose, and between this objectivity and the teleological determination a new means is to be interjected, and so on to infinity. The *infinite progress of mediation* is thereby set in motion. – The same happens as regards the other premise, the connection of the means with the yet indeterminate object. Since the two terms are utterly self-subsistent, they can be united only in a third, and so on to infinity. – Or conversely, since the premises already presuppose the *conclusion*, the latter can only be

imperfect, for it is based on those only immediate premises. The conclusion or the *product* of the purposive activity is nothing but an object determined by a purpose that is external to it; *thus it is the same as what the means is*. In such a product itself, therefore, *only a means* has been derived, not a *realized purpose*; or again: purpose has not truly attained any objectivity in it. – It is therefore entirely a matter of indifference whether we consider an object determined by external purpose as realized purpose or only as means; what we have is not an objective determination but a relative one, external to the object itself. All objects in which an external purpose is
12.169 realized equally are, therefore, only a means of purpose. Anything which is intended for the realization of a purpose and is taken essentially as a means, is such a means by virtue of its vocation[37] that it be used up. But also the object that is supposed to contain the realized purpose and show itself to be its objectivity is perishable; it likewise fulfills its purpose not by a tranquil, self-preserving existence, but only to the extent that it is worn out, for only to this extent does it conform to the unity of the concept, namely in so far as its externality, that is, its objectivity, sublates itself in that unity. – A house, a clock, may appear as purposes with respect to the instruments employed in their production; but the stones, the cross-beams, or the wheels, the axles, and the rest that make up the actuality of the purpose, fulfill this purpose only through the pressure which they suffer, through the chemical processes to which they are exposed with air, light, and water, and from which they shield the human being; through their friction, and so on. They fulfill their vocation, therefore, only through their being used up and worn out, and only by virtue of their negation do they correspond to what they are supposed to be. They are not united with purpose positively, because they possess self-determination only externally and are only relative purposes, or essentially only means.

These purposes thus in general have a restricted content; their form is the infinite self-determination of the concept, which through that content has restricted itself to external singularity. The restricted content renders these purposes inadequate to the infinity of the concept, relegating them to untruth; such a determinateness is through the sphere of necessity, through being, already at the mercy of becoming and alteration and passes away.

3. The result now is that external purposiveness, which only has so far the form of teleology, only goes so far as to be a means, not to be an objective purpose, because subjective purpose remains an external, subjective determination. Or in so far as purpose is active and attains completion,

[37] *Bestimmung.*

albeit only in a means, it is still bound up with objectivity *immediately*; it is sunk into it. Purpose is itself an object and, as one may say, it does not attain a means because its realization is needed before such a realization can be brought about through a means.

But the result is in fact not only an external purposive connection, but the truth of such a connection, inner purposive connection and an objective purpose. The self-subsistence of the object over against the concept that purpose presupposes is *posited* in this presupposition as an unessential reflective shine and as already sublated in and for itself; the activity of the purpose truly is, therefore, only the exposure of this reflective shine and the sublation of it. – As the concept has demonstrated,[38] the first object becomes by virtue of communication a means, for it implicitly is the totality of the concept, and its determinateness, which is none other than the externality itself, is posited *as* something only external and unessential – is posited **12.170**
in purpose itself, therefore, as the latter's own moment, not as anything that stands on its own over against it. As a result, the determination of the object as a means is altogether immediate. There is no need, therefore, for the subjective purpose to exercise any violence to make the object into a means, no need of extra reinforcement; the *resolution*,[39] the resolve,[40] this determination of itself, is the *only posited* externality of the object, which is therein immediately subjected to purpose, and has no other determination as against it than that of the nothingness of the being-in-and-for-itself.

The second sublating of objectivity through objectivity differs from this first sublation in that the latter, being the first, is the purpose in objective *immediacy*; the second, therefore, is not only the sublating of a first immediacy but of both, of the objective as something merely posited and of the immediate. The negativity thus returns to itself in such a way that it is equally the restoration of objectivity, but of an objectivity which is identical with it, and in this it is at the same time also the positing of it as an external objectivity which is only determined by purpose. Because of this positing, the product remains as before also a means; because of the identity with negativity, the product is an objectivity which is identical with the concept, is the realized purpose in which the side of being a means is the reality itself of purpose. In the completed purpose the means disappears because it would be simply and solely the objectivity immediately subsumed under that purpose, an objectivity which in the realized purpose is the turning back of the purpose into itself; further, there also disappears with it mediation itself, as the relating of an external; it disappears into both

[38] Cf. above, 12.164. [39] *Entschluß.* [40] *Aufschluß.*

the concrete identity of objective purpose, and into the same identity as abstract identity and immediacy of existence.

Herein is also contained the mediation that was required for the first premise, the immediate connection of the purpose with the object. The realized purpose is also a means; conversely, the truth of the means is just this, to be the real purpose itself, and the first sublation of objectivity is already also the second, just as the second proved to contain the first also.[41] For the concept *determines itself*, its determinateness is the external indifference which is immediately determined in the resolution as *sublated*, that is to say, as *inner*, *subjective* indifference and at the same time as *presupposed object*. Its further procession out of itself that appeared – namely as the *immediate* communication and subsumption of the presupposed object under it – is at one and the same time the sublating of that determinateness of externality which was internal, *shut up in the concept*, that is, posited as sublated, and the sublating of the presupposition of an object;
12.171 consequently, this apparently first sublating of the indifferent objectivity is already the second as well, an immanent reflection that has gone through mediation, and the realized purpose.

Since the concept is here, in the sphere of objectivity where its determinateness has the form of *indifferent externality*, in reciprocal action with itself, the exposition of its movement becomes doubly difficult and intricate, for such a movement is itself immediately doubled and a first is always also a second. In the concept taken for itself, that is, in its subjectivity, the difference of itself from itself is as an *immediate* identical totality on its own; but since its determinateness here is indifferent externality, its self-identity is in this externality immediately also self-repulsion again, so that what is determined as external and indifferent to the identity is rather this identity itself, and the identity as identity, as self-reflected, is rather its other. Only by firmly attending to this shall we comprehend the objective turning back of the concept into itself, that is, its true objectification; only then shall we see that every one of the single moments through which this mediation runs its course is itself the whole syllogism of the mediation. Thus the original *inner* externality of the concept, by virtue of which the concept is self-repelling unity, purpose and the striving of purpose towards objectivity, is the immediate positing or the presupposition of an external object; the *self-determination* is also the determination of an *external* object not determined by the concept; and conversely this determination is self-determination, that is, the sublated externality *posited as inner*, or

[41] Cf. above, 12.168.

the *certainty of the unessentiality* of the external object. – Of the second connection, that of the determination of the object as a means, we have just shown[42] how it is within itself the self-mediation of purpose in the object. – Likewise the third mode of connection, mechanism, which proceeds under the dominance of purpose and sublates the object by virtue of the object, is on the one hand the sublating of the means, of the object already posited as sublated, and consequently a second sublation and immanent reflection, and on the other hand a first determining of the external object. This last, as we remarked,[43] is in the realized purpose again the production of only a means; the subjectivity of the finite concept, by contemptuously rejecting the means, has attained nothing better in its goal. But this reflection, namely that purpose is attained in the means and that the means and the mediation are preserved in the fulfilled purpose, is the *final result of the external connection of purpose* – a result in which this connection has sublated itself and which it has exhibited as its truth. – The last considered third syllogism differs from the rest in that it is in the first instance the subjective purposive activity of the preceding syllogism, but also the sublation of external objectivity and consequently of externality in general; it is this *through itself*, and is, therefore, *the totality in its positedness*. **12.172**

We have now seen *subjectivity*, the *being-for-itself* of the concept, pass over into the concept's *being-in-itself*, into *objectivity*, and then the negativity of that being-for-itself reassert itself in objectivity; the concept has so determined itself in that negativity that its *particularity* is *an external objectivity*, or has determined itself as the simple concrete unity whose externality is its self-determination. The movement of purpose has now attained this much, namely that the moment of externality is not just posited in the concept, the purpose is not just an *ought* and a *striving*, but as a concrete totality is identical with immediate objectivity. This identity is on the one hand the simple concept, and the equally *immediate* objectivity, but, on the other hand, it is just as essentially *mediation*, and it is that simple immediacy only through this mediation sublating itself as mediation. Thus the concept is essentially this: to be distinguished, as an identity existing for itself, from its *implicitly existent* objectivity,[44] and thereby to obtain externality, but in this external totality to be the totality's self-determining identity. So the concept is now *the idea*.

[42] i.e., in the preceding page. [43] Cf. above, 12.168. [44] *ansichseiende Objectivität.*

SECTION III

12.173

The idea

The idea is the *adequate*[1] *concept*, the objectively *true*, or the *true as such*. If anything has truth, it has it by virtue of its idea, or *something has truth only in so far as it is idea*. – The expression "idea" has otherwise also often been used in philosophy as well as in ordinary life for "concept," or even for just a "representation." To say that I still have no *idea* of this lawsuit, this building, this region, means nothing more than I still have no *representation* of it. It is Kant who reclaimed the expression "idea" for the "concept of reason."[2] – Now according to Kant the concept of reason should be the concept of the *unconditional*, but a concept which is *transcendent* with respect to appearances, that is, one for which *no adequate empirical use* can be made. The concepts of reason are supposed to serve for the *comprehension* of perceptions, those of the understanding for the *understanding* of them.[3] – In fact, however, if these last concepts of the understanding are truly *concepts*, then *they are comprehensions*, which means *concepts*;[4] they will make comprehending[5] possible, and an *understanding* of perceptions through concepts of the understanding will be a *comprehending*. But if understanding is only the determining of perceptions by categories such as whole and parts, force, cause, and the like, then it signifies only a determining by means of reflection, just as by *understanding* one may mean only the determinate *representation* of a fully determined sensuous content; as when someone is being shown the way, that at the end of the wood he must turn left, and he replies "I understand," *understanding* means nothing more than a grasp in pictorial representation and in memory. – "Concept of reason," too, is a somewhat clumsy expression; for the concept is in general something rational, and in so far as reason is distinguished from the understanding and the concept as such, it is the totality of the

[1] Hegel uses *adäquate*, a Latinate word obviously intended to bring to mind the traditional definition of truth as *adequatio rei et intellectus*. It is in the "idea" that this conformity of objectivity and subjectivity is achieved.

[2] A310ff./B366ff. [3] A310/B367. [4] *Begriffe*. [5] *begreifen*.

concept and objectivity. – The idea is the *rational* in this sense; it is the unconditioned, because only that has conditions which essentially refers to an objectivity that it does not determine itself but which still stands over against it in the form of indifference and externality, just as the external purpose had conditions. **12.174**

If we now reserve the expression "idea" for the objective or real concept and we distinguish it from the concept itself and still more from mere representation, then we must also even more definitely reject that estimate of it according to which the idea is something with no actuality, and true thoughts are accordingly said to be *only ideas*. If *thoughts* are something merely *subjective* and contingent, then they certainly have no further value; but in this they do not stand lower than the temporal and contingent *actualities* which likewise have no further value than that of accidentalities and appearances. But if, on the contrary, the idea is supposed not to have the value of truth because in regard to appearances it is *transcendent*, because no congruent object can be given for it in the world of the senses, then this is indeed an odd misunderstanding, for objective validity is being denied to it on the ground that it lacks precisely what makes of appearances the *untrue being* of the objective world. In regard to the practical ideas, Kant recognizes that "nothing can be more harmful and unworthy of a philosopher than the *vulgar* appeal to *experience*, which supposedly contradicts the idea. Any such alleged contradiction would not be there at all if, for example, political institutions were set up at the right time in accordance with ideas, and if *crude concepts*, crude just because they are *drawn from experience*, had not usurped the place of ideas thus thwarting all good intentions."[6] Kant regards the idea as something necessary, the goal which, as the *archetype*, we must strive to set up as a maximum and to which we must bring actuality as it presently stands ever closer.

But since the result now is that the idea is the unity of the concept and objectivity, the true, we must not regard it as just a *goal* which is to be approximated but itself remains always a kind of *beyond*; we must rather regard everything *as being* actual only to the extent that it has the idea in it and expresses it. It is not just that the subject matter, the objective and the subjective world, *ought* to be in principle *congruent* with the idea; the two are themselves rather the congruence of concept and reality; a reality that does not correspond to the concept is mere *appearance*, something subjective, accidental, arbitrary, something which is not the truth. When it is said that there is no subject matter to be found in experience which

[6] Cf. A316–317/B373.

is perfectly congruent with the *idea*, the latter is opposed to the actual as a subjective standard; but there is no saying what anything actual might possibly *be in truth*, if its concept is not in it and its objectivity does not measure up to this concept; it would then be a nothing. Indeed, the mechanical and the chemical object, like a subject devoid of spirit and a
12.175 spirit conscious only of finitude and not of its essence, do not, according to their various natures, have their concept concretely existing in them *in its own free form*. But they can be something at all true only in so far as they are the union of their concept and reality, of their soul and their body. Wholes like the state and the church cease to exist *in concreto* when the unity of their concept and their reality is dissolved; the human being, the living thing, is dead when soul and body are parted in it; dead nature, the mechanical and the chemical world – that is, when "the dead" is taken to mean the inorganic world, for the expression would otherwise have no positive meaning at all – this dead nature, then, if it is separated into its concept and its reality, is nothing but the subjective abstraction of a thought form and a formless matter. Spirit that were not idea, not the unity of the concept with itself, not the concept that has the concept itself as its reality, would be dead spirit, spiritless spirit, a material object.

Since the idea is the unity of the concept and reality, *being* has attained the significance of *truth*; it now *is*, therefore, only what the idea is. Finite things are finite because, and to the extent that, they do not possess the reality of their concept completely within them but are in need of other things for it – or, conversely, because they are presupposed as objects and consequently the concept is in them as an external determination. The highest to which they attain on the side of this finitude is external purposiveness. That actual things are not congruent with the idea constitutes the side of their *finitude*, of their *untruth*, and it is according to this side that they are *objects*, each in accordance with its specific sphere, and, in the relations of objectivity, determined as mechanical, chemical, or by an external purpose. That the idea has not perfectly fashioned their reality, that it has not completely subjugated it to the concept, the possibility of that rests on the fact that the idea itself has a *restricted content*; that, as essentially as it is the unity of the concept and reality, just as essentially it is also their difference; for only the object is the immediate unity, that is, the unity that only *exists in itself*. But if a subject matter, say the state, *did not at all conform* to its idea, that is to say, if it were not rather the idea of the state; if its reality, which is the self-conscious individuals, did not correspond at all to the concept, its soul and body would have come apart; the soul would have taken refuge in the secluded regions of thought, the body been dispersed into singular

individualities. But because the concept of the state is essential to the nature of these individualities, it is present in them as so mighty an impulse that they are driven to translate it into reality, be it only in the form of external purposiveness, or to to put up with it as it is, or else they must needs perish. The worst state, one whose reality least corresponds to the concept, in so far as it still has concrete existence, is yet idea; the individuals still obey the power of a concept. **12.176**

But the idea has not only the general meaning of *true being*, of the unity of *concept* and *reality*, but also the more particular one of the unity of *subjective concept* and *objectivity*. For the concept is as such itself already the identity of itself and *reality*; for the indeterminate expression "reality" means nothing but *determinate being*, and this the concept possesses in its particularity and singularity. *Objectivity*, moreover, is likewise the total *concept* that has withdrawn into *identity* with itself out of its determinateness. In the subjectivity of the concept, the determinateness or the difference of the latter is a *reflective shine* which is immediately sublated, withdrawn into being-for-itself or into negative unity, an *inhering* predicate. But in this objectivity the determinateness is posited as immediate totality, as external whole. Now the idea has shown itself to be the concept liberated again into its subjectivity from the immediacy into which it has sunk in the object; it is the concept that distinguishes itself from its objectivity – but an objectivity which is no less determined by it and possesses its substantiality only in that concept. This identity has therefore rightly been designated as a *subject-object*, for it is *just as well* the formal or subjective concept *as* it is the object as such.[7] But this is a point that needs further precision. The concept, inasmuch as it has truly attained its reality, is this absolute judgment whose *subject* distinguishes itself as self-referring negative unity from its objectivity and is the latter's being-in-and-for-itself; but it refers to it essentially through itself and *is*, therefore, *self-directed purpose and impulse*. For this very reason, however, the subject does not possess objectivity immediately in it (it would then be only the totality of the object as such, a totality lost in the objectivity) but is the realization of the purpose – an objectivity *posited* by virtue of the activity of the purpose, one which, as *positedness*, has its subsistence and its form only as

[7] Cf. Fichte, according to whom "ideas are *problems* or *tasks* for thinking." The fundamental task is to think of a reciprocal determination of the subjective and the objective, a reciprocity which we find already realized in the thought of a "drive" (*Trieb*). Cf. *Das System der Sittenlehre nach den Prinzipien der Wissenschaftslehre* (1798); English trans., Daniel Breazeale and Günter Zöller, *Johann Gottlieb Fichte: The System of Ethics. According to the Principles of the Wissenschaftslehre* (Cambridge: Cambridge University Press, 2005); see pp. 67, 50–51, 46–47.

permeated by its subject. As objectivity, it has the moment of the *externality* of the concept in it and is in general, therefore, the side of finitude, of alteration and appearance; but this side retreats into the negative unity of the concept and there it perishes; the negativity whereby its indifferent externality of being[8] manifests itself as unessential and as a positedness is the concept itself. Despite this objectivity, the idea is therefore absolutely *simple* and *immaterial*, for the externality has being only as determined by the concept and as taken up into its negativity; in so far as it exists as indifferent externality, it is not only abandoned to mechanism in general but exists only as the transitory and untrue. – Thus although the idea
12.177 has its reality in a materiality,[9] the latter is not an abstract *being* standing over against the concept but, on the contrary, it exists only as *becoming*, as simple determinateness of the concept by virtue of the negativity of the indifferent being.

This yields the following closer determinations of the idea. – *First*, the idea is the simple truth, the identity of concept and objectivity as a *universal* in which the opposition, the presence of the particular, is dissolved in its self-identical negativity and is equality with itself. *Second*, it is the *connection* of the subjectivity of the simple concept, existing for itself, and of the concept's objectivity which is distinguished from it; the former is essentially the *impulse* to sublate this separation, and the latter is indifferent positedness, subsistence which in and for itself is null. As this connection, the idea is the *process* of disrupting itself into individuality and into the latter's inorganic nature, and of then bringing this inorganic nature again under the controlling power of the subject and back to the first simple universality. The *identity* of the idea with itself is one with the *process*; the thought that liberates actuality from the seeming of purposeless mutability and transfigures it into *idea* must not represent this truth of actuality as dead repose, as a mere *picture*, numb, without impulse and movement, as a genius or number, or as an abstract thought; the idea, because of the freedom which the concept has attained in it, also has the *most stubborn opposition* within it; its repose consists in the assurance and the certainty with which it eternally generates that opposition and eternally overcomes it, and in it rejoins itself.

But the idea is at first again only *immediate* or only in its *concept*; the objective reality is indeed conformable to the concept but has not yet been liberated into the concept, and it does not concretely exist *explicitly as the concept*. Thus the concept is indeed the soul, but the soul is in the

[8] *ihr gleichgültiges Aussereinandersein.* [9] *Materiatur.*

guise of an *immediate*, that is, it is not determined as soul itself, has not comprehended itself as soul, does not have its objective reality within itself; the concept is as a soul that is not yet *fully animated*.[10]

Thus the idea is, *first of all*, *life*. It is the concept which, distinct from its objectivity, simple in itself, permeates that objectivity and, as self-directed purpose, has its means within it and posits it as its means, yet is immanent in this means and is therein the realized purpose identical with itself. – The idea, on account of its immediacy, has *singularity* for the form of its concrete existence. But the reflection within it of its absolute process is the sublating of this immediate singularity; thereby the concept, which as universality is in this singularity the *inner*, transforms externality into universality, or posits its objectivity as a self-equality.

Thus is the idea, *in second place*, the idea of the *true* and the *good*, as *cognition* and *will*. It is at first finite cognition and finite will, where the **12.178**
true and the good are still distinguished and the two are at first only as a *goal*. The concept has first liberated *itself* into itself, giving itself only a still *abstract objectivity* for its reality. But the process of this finite cognition and this finite action transforms the initially abstract universality into totality, whereby it becomes *complete objectivity*. – Or considered from the other side, finite, that is, subjective spirit, *makes* for itself the *presupposition* of an objective world, such a presupposition as life only *has*; but its activity is the sublating of this presupposition and the turning of it into something posited. Thus its reality is for it the objective world, or conversely the objective world is the ideality in which it knows itself.

Third, spirit recognizes[11] the idea as its *absolute truth*, as the truth that is in and for itself: the infinite idea in which cognizing[12] and doing are equalized, and which is the *absolute knowledge*[13] *of itself*.

[10] *seelenvoll.* [11] *erkennt.* [12] *erkennen.* [13] *wissen.*

CHAPTER I

12.179

Life

The idea of life has to do with a subject matter so concrete, and if you will so real, that in dealing with it one may seem according to the common notion of logic to have overstepped its boundaries. Needless to say, if the logic were to contain nothing but empty, dead forms of thought, then there could be no talk in it at all of such a content as the idea, or life, are. But if the subject matter of logic is the absolute truth, and *truth* as such lies essentially *in cognition*, then *cognition* at least would have to come in for consideration. – It is common practice to have the so-called pure logic be followed by an *applied* logic – a logic that has to do with *concrete cognition*, quite apart from all the *psychology* and *anthropology* that is commonly deemed necessary to interpolate into logic. But the anthropological and psychological side of cognition is concerned with the *form in which cognition appears* when the concept does not as yet have an objectivity equal to it, that is, when it does not have itself as object. The part of the logic that deals with this concrete cognition does not belong to *applied logic* as such; if it did, then every science would have to be dragged into logic, for each is an applied logic in so far as it consists in apprehending its subject matter in forms of thought and of concepts. – The subjective concept has presuppositions that are exhibited in psychological, anthropological, and other forms. But the presuppositions of the pure concept belong in logic only to the extent that they have the form of pure thoughts, of abstract essentialities, such as are the determinations of *being* and *essence*. The same goes for *cognition*, which is the concept's comprehension of itself: no other shape of its presupposition but the one which is itself idea is to be dealt with in the logic; this, however, is a presupposition which is necessarily treated in logic. This presupposition is now the *immediate* idea; for while cognition is the concept, in so far as the latter exists for itself but as a subjectivity referring to an objectivity, then the concept refers to the idea as *presupposed* or as *immediate*. But the immediate idea is *life*.

To this extent the necessity of considering the idea of life in logic would be based on the necessity, itself recognized in other ways, of treating the concrete concept. But this idea has arisen through the concept's own **12.180** necessity; the *idea*, that which is *true* in and for itself, is essentially the subject matter of the logic; since it is first to be considered in its immediacy, so that this treatment be not an empty affair devoid of determination, it is to be apprehended and cognized in this determinateness in which it is *life*. A comment may be in order here to differentiate the logical view of life from any other scientific view of it, though this is not the place to concern ourselves with how life is treated in non-philosophical sciences but only with how to differentiate logical life as idea from natural life as treated in the *philosophy of nature*, and from life in so far as it is bound to *spirit*. – As treated in the philosophy of nature, as the life of nature and to that extent exposed to the *externality of existence*, life is *conditioned* by inorganic nature and its moments as idea are a manifold of actual shapes. Life in the idea is without such *presuppositions*, which are in shapes of actuality; its presupposition is the *concept* as we have considered it, on the one hand as subjective, and on the other hand as objective. In nature life appears as the highest stage that nature's externality can attain by withdrawing into itself and sublating itself in subjectivity. It is in logic the simple in-itselfness which in the idea of life has attained the externality truly corresponding to it; the concept that came on the scene earlier as a subjective concept is the soul of life itself; it is the impulse that gives itself reality through a process of objectification. Nature, as it reaches this idea starting from its externality, transcends itself; its end is not its beginning but is for it as a limit in which it sublates itself. – Similarly, in the idea of life the moments of life's reality do not receive the shape of external actuality but remain enveloped in conceptual form.

In *spirit*, however, life appears both as opposed to it and as posited as at one with it, in a unity reborn as the pure product of spirit. For life is here to be taken generally in its proper sense as *natural life*, for what is called the *life of spirit* as spirit, is spirit's own peculiar nature that stands opposed to mere life; just as we speak of the *nature* of spirit, even though spirit is nothing natural but stands rather in opposition to nature. Thus life as such is for spirit in one respect a *means*, and then spirit holds it over against itself; in another respect, spirit is an individual, and then life is its body; in yet another respect, this unity of spirit and its living corporeality is born of spirit into *ideality*. None of these connections of life to spirit concerns logical life, and life is to be considered here neither as the instrument of **12.181** a spirit, nor as a living body, nor again as a moment of the ideal and of beauty. – In both cases, as *natural life* and as referring *to spirit*, life obtains a

determinateness from its externality, in one case through its presuppositions, such as are other formations of nature, and in the other case through the purposes and the activity of spirit. The idea of life by itself is free from both the conditioning objectivity presupposed in the first case and the reference to subjectivity of the second case.

Life, considered now more closely in its idea, is in and for itself absolute *universality*; the objectivity which it possesses is throughout permeated by the concept, and this concept alone it has as substance. Whatever is distinguished as part, or by some otherwise external reflection, has the whole concept within it; the concept is the soul *omnipresent* in it, a soul which is simple self-reference and remains one in the manifoldness that accrues to the objective being. This manifoldness, as self-external objectivity, has an indifferent subsistence which in space and time, if these could already be mentioned here, is a mutual externality of entirely diverse and atomistic matters. But externality is in life at the same time as the *simple determinateness* of its concept; thus the soul flows omnipresently in this manifold but remains at the same time the simple oneness of the concrete concept with itself. – That way of thinking that clings to the determinations of reflective relations and of the formal concept, when it comes to consider life, the unity of its concept in the externality of objectivity, the absolute multiplicity of atomistic matter, finds that all its thoughts are absolutely of no avail; the omnipresence of the simple in the manifold externality is for reflection an absolute contradiction and also, since it cannot at the same time avoid witnessing this omnipresence in the perception of life and must therefore grant the actuality of this idea, an *incomprehensible mystery* – for reflection does not grasp the concept, nor does it grasp it as the substance of life. – But this simple life is not only omnipresent; it is the one and only *subsistence* and *immanent substance* of its objectivity; but as subjective substance it is *impulse*, more precisely the *specific impulse of particular* difference, and no less essentially the one and universal impulse of the specific that leads its particularization back to unity and holds it there. Only as this *negative unity* of its objectivity and particularization is life self-referring, life that exists for itself, a soul. As such, it is essentially a *singular* that refers to objectivity as to an other, an inanimate nature. The originative *judgment* of life consists therefore in this, that it separates itself off as individual subject from the objective and, since it constitutes itself as the negative unity of
12.182 the concept, makes the *presupposition* of an immediate objectivity.

First, life is therefore to be considered as a *living individual* that is for itself the subjective totality and is presupposed as indifferent to an objectivity that stands indifferent over against it.

Second, it is *the life-process* of sublating its presupposition, of positing as negative the objectivity indifferent to it, and of actualizing itself as the power and negative unity of this objectivity. By so doing, it makes itself into the universal which is the unity of itself and its other.

Third, consequently life is the *genus-process*, the process of sublating its singularization and relating itself to its objective existence as to itself. Accordingly, this process is on the one hand the turning back to its concept and the repetition of the first forcible separation, the coming to be of a new individuality and the death of the immediate first; but, on the other hand, the *withdrawing into itself of the concept* of life is the becoming of the concept that relates itself to itself, of the concept that exists for itself, universal and free, the transition into *cognition*.

A. THE LIVING INDIVIDUAL

1. The concept of life or universal life is the immediate idea, the concept that has an objectivity corresponding to it; but the objectivity corresponds to it only to the extent that the concept is the negative unity of this externality, that is to say, *posits* it as corresponding to it. The infinite reference of the concept to itself is as negativity a self-determining, the diremption of itself within itself *as subjective singularity and itself as indifferent universality*. The idea of life in its immediacy is as yet only the creative universal soul. Because of this immediacy, the first internal negative reference of the idea is the self-determination of itself as *concept* – an *implicit* positing which is *explicit* only as a turning back into itself; this is the creative *presupposing*. By virtue of this self-determining, *universal* life is *particularized*; it has thus split itself into the two extremes of the judgment which immediately becomes syllogism.

The determinations of the opposition are the universal *determinations of the concept*, for the splitting into two is the affair of the concept; the *filling* of them, however, is the idea. One determination is the *unity* of the concept and of reality, which is the idea as the immediate unity that earlier assumed the form of *objectivity*. Here, however, it is in another determination. There, it was the unity of the concept and of reality in **12.183** so far as the concept has gone over into reality and is lost in it; it did not stand opposite to it, or, since it is for the reality only an *inner*, it is itself for it only an *external* reflection. That earlier objectivity is therefore the immediate itself in immediate mode. Here, on the contrary, it has proceeded only from the concept, so that its essence is positedness, or that it exists as *negative*. – It is to be regarded as the *side of the universality of*

the concept, hence as an *abstract* universality, essentially only *inhering* in the subject and in the form of immediate *being* which, posited for itself, is indifferent to the subject. Hence the totality of the concept that attaches to the objectivity is, as it were, only *lent* to it; the last self-subsistence that objectivity has over against the subject is this *being* whose truth is only that moment of the concept in which the latter, as a *presupposing*, is in the first determinateness of a positing that exists *implicitly* and is not yet *as* positing, as immanently reflected unity. Having proceeded from the idea, self-subsisting objectivity is therefore immediate being only as the *predicate* of the judgment of the concept's self-determination – a being that is indeed distinct from the subject but is at the same time essentially posited as a *moment* of the concept.

According to content, this objectivity is the totality of the concept – a totality, however, that has the subjectivity of the concept, or its negative unity, standing over against it, and this subjectivity or negativity is what constitutes the true centrality, that is to say, the concept's free unity with itself. This *subject* is the idea in the form of *singularity*, as simple but negative self-identity – the *living individual*.

This individual is in the first place life as *soul*, as the concept of itself, fully determined within itself, the initiating self-moving *principle*. In its simplicity the concept contains determinate externality, *as a simple* moment enclosed within itself. – But, further, this soul is *in its immediacy* immediately external, and has an objective being within it – a reality which is subjugated to purpose, the immediate *means*, at first the objectivity which is *predicated* of the subject, but then also the *middle term* of the syllogism, for the corporeity of the soul is that whereby the soul links itself to external objectivity. – The living being has this corporeity at first as a reality immediately identical with the concept; to this extent, the corporeity has this reality in general by *nature*.

Now because this objectivity is the predicate of the individual and is taken up in the subjective unity, the earlier determinations of the objects do not attach to it, not the relation of mechanism or of chemism, and even less so the reflective relations of whole and part, and the like. As externality, it is indeed *capable* of such relations, but to that extent it is no longer a living being; when a living thing is taken to be a whole consisting
12.184 of parts, something exposed to the action of mechanical or chemical causes, itself a mechanical or chemical product (whether merely as such or as also determined by some external purpose), then the concept is taken as external to it, the individual itself as something *dead*. Since the concept is immanent in it, the *purposiveness* of the living being is to be grasped as *inner*; it is

present in it as a determinate concept, distinguished from its externality but, in thus distinguishing itself from it, pervading it thoroughly and self-identical. This objectivity of the living being is the *organism*; it is the *means and instrument* of purpose, fully purposive, for the concept constitutes its substance; but precisely for this reason this means and instrument is itself the accomplished purpose in which the subjective purpose thus immediately closes in upon itself.[14] As for its externality, the organism is a manifold, not of *parts* but of *members*. (a) These members exist as such only in the individuality; they are separable inasmuch as they are external and can be grasped in this externality, but as thus separated they revert to the mechanical and chemical relations of common objectivity. (b) Their externality is opposed to the negative unity of the living individuality. This individuality is therefore the *impulse* to posit as a concretely real[15] difference the otherwise abstract moment of the determinateness of the concept; and since this concretely real difference *exists as immediate*, it is the *impulse of each singular*, *specific* moment to produce itself and equally to raise its particularity to universality, to sublate the other moments external to it and promote itself at their cost, but no less to sublate itself and make itself a means for the other.

2. This *process* of the living individuality is restricted to itself and still falls entirely within the individuality. – The first premise of the syllogism of external purposiveness, where the purpose immediately refers to objectivity and makes it a means, was earlier[16] taken in the sense that although in it the purpose remains self-equal and has gone back into itself, the objectivity has not yet sublated itself *within*, and consequently the purpose is not in it *in* and *for itself* but becomes such only in the conclusion. The process of the living being with itself is this same premise, but in so far as the premise is also the conclusion, in so far as the immediate reference of the subject to the objectivity, by virtue of which the latter becomes means and instrument, is at the same time the *negative unity* of the concept within itself, the purpose realizes itself in this externality by being the subjective power over it and the process in which the externality displays its self-dissolution and its return into this negative unity of the purpose. The unrest and the mutability of the external side of the living being is the manifestation in it of the concept, and the concept, **12.185** as in itself negativity, has objectivity in so far as this objectivity's indifferent subsistence shows itself to be self-sublating. Thus the concept produces itself through its impulse in such a way that the product, being its

[14] *mit sich selbst zusammen geschlossen ist.* [15] concretely real = *reell.* [16] Cf. above, 12.168.

essence, is itself the producing factor: is product, in other words, only as an externality that equally posits itself negatively, or as the process of production.

3. Now the idea as just considered is the *concept of the living subject* and *of its process*; the determinations that stand in relation to one another are the self-referring *negative unity* of the concept and the *objectivity* which is the concept's means but also where the concept has *returned* into itself. But since these moments of the idea of life *do not go past the concept of life*, they are not the determinate conceptual moments of the *living individual in its reality*. This individual's objectivity or its corporeity is a concrete totality; those moments are the sides out of which the living reality[17] constitutes itself; they are not, therefore, the moments of this reality as already constituted by the idea. But the living *objectivity* of the individual, since as objectivity it is ensouled by the concept and has the latter for its substance, has also in it, for its essential difference, such determinations as pertain to the concept, *universality*, *particularity*, *and singularity*; hence the *shape* in which the determinations in it are *externally* differentiated is divided or incised (*insectum*) in accordance with these.

Thus that shape is *in this instance universality*, the purely internal pulsating of living reality, *sensibility*. The concept of universality, as we saw it earlier, is the simple immediacy which is such, however, only as inherently absolute negativity. This concept of *absolute difference* with its negativity *dissolved into simplicity* and self-equal, is brought to intuition in sensibility. It is the in-itselfness not as abstract simplicity, but as an infinite *determinable* receptivity that does not become in its *determinateness* anything manifold and external but is absolutely reflected into itself. *Determinateness* is present in this universality as simple *principle*; the singular external determinateness, the so-called *impression*, goes back from its external and manifold determination into this simplicity of *self-feeling*. Sensibility may therefore be regarded as the external existence of the inward soul, for it takes in all externality but reduces it to the complete simplicity of self-equal universality.

The second determination of the concept is *particularity*. This is the moment of *posited* difference, the opening up of the negativity otherwise locked up in simple self-feeling or present in it as abstractly ideal, not yet concretely real determinateness. It is *irritability*. Because of the abstraction

[17] living reality = *Lebendigkeit*.

of its negativity, feeling is impulse; it *determines* itself; the self-determination **12.186**
of the living being is its judgment or the self-limiting whereby it refers to the outside as to a *presupposed* objectivity with which it is in reciprocal activity. – The living being, as a particular, now stands on one side as one species next to other species; the *formal* reflection of this *indifferent diversity* into itself is the formal *genus* and its systematization; but the individual reflection is this, that as outwardly directed the particularity, the negativity of the living being's determinateness, is the self-referring negativity of the concept.

According to this *third* determination, the living being is a *singular*. This immanent reflection further determines itself in such a way that in irritability the living being is the externality of itself as against itself, as against the objectivity that it possesses immediately as its means and instrument and which is externally determinable. The immanent reflection sublates this immediacy: on the one side as theoretical reflection, that is, in so far as the negativity is the simple moment of sensibility as was considered in the latter, and which constitutes *feeling*; on the other side as real reflection, in that the unity of the concept posits itself *in its externality* as negative unity, and this is *reproduction*. – The two first moments, sensibility and irritability, are abstract determinations; in reproduction life is *something concrete* and vital; in it alone does it also have feeling and power of resistance. Reproduction is the negativity as simple moment of sensibility, and irritability is only a vital power of resistance, so that the relation to the external is reproduction and identity of the individual with itself. Each singular moment is essentially the totality of all; their difference constitutes the ideal determination of form which is posited in reproduction as the concrete totality of the whole. On the one hand, therefore, this whole is opposed to the previous determinate totalities as a third, namely as a *concretely real* totality; on the other hand, however, it is their implicit essentiality and also that in which they are comprehended as moments and where they have their subject and subsistence.

With reproduction as a moment of singularity, the living being posits itself as *actual* individuality, a self-referring being-for-itself; but it is at the same time a real *outward reference*, the reflection of *particularity* or irritability *as against an other*, as against the *objective* world. The life-process enclosed within the individual passes over into a reference to the presupposed objectivity as such, by virtue of the fact that, as the individual posits itself as *subjective* totality, the *moment of its determinateness*, *its reference* to externality, also becomes a *totality*.

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B. THE LIFE-PROCESS

In shaping itself inwardly, the living individual comes into tension with its original presupposing and, as a subject existing in and for itself, sets itself in opposition to the presupposed objective world. The subject is a purpose unto itself, the concept that has its means and subjective reality in the objectivity subjugated to it. As such, it is constituted as the idea existing in and for itself and as an essentially self-subsistent being, as against which the presupposed external world has the value only of something negative and without self-subsistence. In its self-feeling the living being has the *certainty* of the intrinsic *nullity* of the *otherness* confronting it. Its impulse is the need to sublate this otherness and to give itself the truth of this certainty. At first the individual is, as subject, only the *concept* of the idea of life; its inner subjective process in which it feeds upon itself, and the immediate objectivity which it posits as a natural means in conformity with its concept, are mediated by the process that refers to the fully posited externality, to the objective totality standing *indifferently* alongside it.

This process begins with *need*, that is, the twofold moment of self-determination of the living being by which the latter posits itself as negated and thereby refers itself to an *other* than it, to the indifferent objectivity, but in this self-loss it is equally not lost, preserves itself in it and remains the identity of the self-equal concept. The living being is thereby the impulse to posit *as its own* this *world which is other than it*, to posit itself as equal to it, to sublate the world and objectify *itself*. Its self-determination has therefore the form of objective externality, and since it is at the same time self-identical, it is the absolute *contradiction*. The immediate shape of the living being is the idea in its simple concept, the objectivity conforming to the concept; as such the shape is *good* by nature. But since its negative moment realizes itself as an objective particularity, that is, since the essential moments of its unity are each realized as a totality for itself, the concept *splits into two*, becoming an absolute inequality with itself; and since even in this rupture the concept remains absolute identity, the living being is for itself this rupture, has the feeling of this contradiction which is *pain*. *Pain* is therefore the prerogative of living natures; since they are the concretely
12.188 existing concept, they are an actuality of infinite power, so that they are in themselves the *negativity* of themselves, that this *their negativity* exists *for them*, that in their otherness they preserve themselves. – It is said that contradiction cannot be thought; but in the pain of the living being it is even an actual, concrete existence.

This internal rupture of the living being, when taken up into the simple universality of the concept, in sensibility, is *feeling*. From pain begin the *need* and the *impulse* that constitute the transition by which the individual, in being for itself the negation of itself, also becomes for itself identity – an identity which only is as the negation of that negation. – The identity which is in the impulse as such is the individual's subjective certainty of itself, in accordance with which it relates to the indifferent, concrete existence of its external world as to an appearance, to an actuality intrinsically void of concept and unessential. This actuality is to obtain its concept only through the subject, which is the immanent purpose. The indifference of the objective world to determinateness and hence to purpose is what constitutes its external aptitude to conform to the subject; whatever other specifications there might be in it, its mechanical determinability, the lack of the freedom of the immanent concept, constitute its impotence in preserving itself against the living being. – In so far as the object confronts the living being at first as something external and indifferent, it can affect it mechanically, but without in this way affecting it as a living thing; and in so far as it does relate to it as a living thing, it does not affect it as a cause but it rather *excites* it. Because the living being is an impulse, externality impinges upon it and penetrates it only to the extent that in principle it is already *in it*; hence the effect on the subject consists only in that the latter *finds* that the externality at its disposal *accords with it*. And should this externality not accord with it as a totality, then it must at least accord with a particular side of it – a possibility lodged in the very fact that, in its relation to the outside, the subject is a particular.

Now the subject, in so far as in being determined in its need it connects with the outside and consequently is itself something external or an instrument, exercises *violence* over the object. Its particular character, its finitude in general, falls into the more determinate appearance of this relation. – The external factor in this is the process of objectivity in general, mechanism and chemism. But this same process is immediately interrupted and the externality transformed into interiority. The external purposiveness which is at first elicited in the indifferent object by the activity of the subject is thereby sublated, for as against the concept the object is not a substance: the concept, therefore, cannot become for it just an external form but must rather posit itself as its essence and as the determinateness immanently pervading it through and through in conformity with the concept's original identity. **12.189**

By seizing hold of the object, the mechanical process passes over into an internal process by which the individual *appropriates* the object in such

a manner that it takes away from it its distinctive make-up, makes it into a means, and confers upon it its own subjectivity as its substance. This assimilation thus coincides with the individual's process of reproduction considered above;[18] in this process the individual feeds on itself, in the sense that it makes its own objectivity its object; the mechanical and chemical conflict of its members with external things is an objective moment of itself. The mechanical and chemical factor in the process is a beginning of the dissolution of the living thing. Since life is the truth of these processes, and as a living being it is therefore the concrete existence of this truth and the power over the processes, it infringes upon the latter, permeates them as their universality, and their product is entirely determined by it. This transformation of them into the living individual constitutes the turning back of this individual into itself, with the result that the production that as such would be the transition into an other becomes reproduction, a reproduction in which the living being posits itself as self-identical *for itself*.

The immediate idea is also the immediate identity of concept and reality but one that does not exist *for itself*; through the objective process, the living being gives itself its *feeling of self*; for in that process it *posits* itself as it is in and for itself, namely, as self-identical in an otherness posited as indifferent to it, as the negative unity of the negative. The individual, in thus rejoining the objectivity at first presupposed as indifferent to it, has equally constituted itself as actual singularity and has sublated *its particularity*, raising it to *universality*. Its particularity consisted in the disruption whereby life posited the individual life and the objectivity external to it as its species. Through the external life-process, it has consequently posited itself as real universal life, as *genus*.

C. THE GENUS

The living individual, at first cut off from the universal concept of life, is a presupposition yet unproven through itself. Through its process with the simultaneously presupposed world, it has posited itself *for itself* as the negative unity of its otherness, as the foundation of itself; thus it is the actuality of the idea, so that the individual now brings itself forth out
12.190 of *actuality*, whereas before it proceeded only from the concept, and its coming to be, which was a *presupposing*, now becomes its production.

[18] Cf. above, 12.186.

But the further determination that it has attained by the sublation of the opposition is that it is *genus*, identity of itself with its hitherto indifferent otherness. This idea of the individual, since it is this essential identity, is essentially the particularization of itself. This particularization, its disruption, in keeping with the totality from which it proceeds, is the duplication of the individual – the presupposing of an objectivity which is identical with it, and a relating of the living being to itself as to another living being.

This universal is the third stage, the truth of life in so far as life is still shut up within itself. This stage is the process of the individual as it refers to itself, where the externality is the individual's immanent moment and is, besides, itself a living totality, an objectivity which for the individual is the individual itself – an externality in which the individual has certainty of itself not as *being sublated*, but as *subsisting*.

Now because the relation of genus is the identity of individual self-feeling in such a one who is at the same time another self-subsistent individual, it is a *contradiction*; accordingly, the living being is once more *impulse*. – The genus is indeed now the completion of the idea of life, but at first it is still within the sphere of immediacy; this universality is therefore *actual* in a *singular* shape; it is the concept whose reality has the form of immediate objectivity. And consequently the individual, although it is the genus, it is the genus *in itself* rather than *for itself*; what is for it is as yet only another living individual; the concept distinguished from itself has for object, with which it is identical, not itself as concept, but a concept rather that as a living being has at the same time external objectivity for it, a form which is therefore immediately reciprocal.

The identity with the other individual, the universality of the individual, is thus still only *inner* or *subjective*; it therefore has the longing to posit this identity and to realize itself as universal. But this impulse of the genus can realize itself only through the sublation of the singular individualities which are still particular to each other. At first, in so far as it is these individualities which, *in themselves* universal, themselves satisfy the tension of their longing and dissolve themselves into the universality of their genus, their realized identity is the negative unity of the genus reflecting itself into itself out of its rupture. To this extent, it is the individuality of life itself, no longer *generated* out of its concept but out of the *actual* idea. At first, it is itself only the concept that still has to objectify itself, but a *concept which is actual – the germ of a living individual*. To *ordinary perception* what the concept is, and that the *subjective concept* has external actuality, are visibly **12.191**
present in it. For the germ of the living being is the complete concretion

of individuality: it is where all the living being's diverse sides, its properties and articulated differences, are contained in their *entire determinateness*; where the at first *immaterial*, subjective totality is present undeveloped, simple and non-sensuous. Thus the germ is the whole living being in the inner form of the concept.

From this side the genus obtains *actuality* through its reflection into itself, for the moment of negative unity and individuality is thereby *posited* in it – the *propagation* of the living species. The idea, which as life is still in the form of immediacy, thus falls back into actuality, and its reflection is now only the repetition and the infinite process in which it does not step outside the finitude of its immediacy. But this going back to its first concept also has the higher side that the idea has not only run through the mediation of its processes inside immediacy, but, just because it has run through them, has sublated this immediacy and has thereby elevated itself to a higher form of its existence.

That is to say, the process of the genus in which the single individuals sublate in one another their indifferent, immediate, concrete existence, and in this negative unity die away, has further the *realized genus* that has posited itself as identical with the concept for the other side of its product. – In the process of the genus, the isolated singularities of individual life perish; the negative identity in which the genus turns back into itself is on the one side the *generation of singularity* just as it is also, on the other side, *the sublation of it* – is thus the genus rejoining itself, the *universality* of the idea *as it comes to be explicitly for itself*. In copulation,[19] the immediacy of living individuality perishes; the death of this life is the coming to be of spirit. The idea, *implicit* as genus, becomes *explicit* in that it has sublated its particularity that constituted the living species, and has thereby given itself a *reality* which is *itself simple universality*; thus it is the idea that *relates itself to itself as idea*, the universal that has universality for its determinateness and existence. This is the *idea of cognition*.

[19] *Begattung*; cf. *Gattung*, which means "genus."

CHAPTER 2

The idea of cognition

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Life is the immediate idea, or the idea as its still internally unrealized *concept*. In its *judgment*, the idea is *cognition* in general.

The concept is *for itself* as concept inasmuch as it freely and concretely exists as abstract universality or a genus. As such, it is its pure self-identity that internally differentiates itself in such a way that the differentiated is not an *objectivity* but is rather equally liberated into subjectivity or into the form of simple self-equality; consequently, the object facing the concept is the concept itself. Its *reality* in general is the *form of its existence*; all depends on the determination of this form; on it rests the difference between what the concept is *in itself*, or as *subjective*, and what it is when immersed in objectivity, and then in the idea of life. In this last, the concept is indeed distinguished from its external reality and posited *for itself*; however, this being-for-itself which it now has, it has only as an identity that refers to itself as immersed in the objectivity subjugated to it, or to itself as indwelling, substantial form. The elevation of the concept above life consists in this, that its reality is the concept-form liberated into universality. Through this judgment the idea is doubled, into the subjective concept whose reality is the concept itself, and the objective concept which is as life. – *Thought*, *spirit*, *self-consciousness*, are determinations of the idea inasmuch as the latter has itself as the subject matter, and its *existence*, that is, the determinateness of its being, is its own difference from itself.

The *metaphysics of the spirit* or, as was more commonly said in the past, *of the soul*, revolved around the determinations of substance, simplicity, immateriality. These were determinations for which spirit was supposed to be the ground, but as a subject drawn from *empirical* consciousness, and the question then was which predicates agreed with the perceived facts. But this was a procedure that could go no further than the procedure of physics, which reduces the world of appearance to general laws and determinations of reflection, for it is spirit still as *phenomenal* that is taken as the foundation. In fact, in so far as scientific stringency goes, it also

had to fall short of physics. For not only is spirit infinitely richer than nature; since its essence is constituted by the absolute unity *in the concept*
12.193 of opposites, and in its appearance, therefore, and in its connection with externality, it exhibits contradiction at its most extreme form, it must be possible to adduce an experience in support of each of the opposite determinations of reflection, or, starting from experiences, to proceed by way of formal inference to the opposite determinations. Since the predicates immediately drawn from the appearances still belong to empirical psychology, so far as metaphysical consideration goes, all that is in truth left are the entirely inadequate determinations of reflection. – In his critique of *rational psychology*,[20] Kant insists that, since this metaphysics is supposed to be a rational science, the least *addition* of anything drawn from perception to the *universal representation* of self-consciousness would alter it into an *empirical* science, thus compromising its rational purity and its independence from all experience. – Accordingly, all that is left on this view is the simple representation "I," a representation entirely devoid of content, of which one cannot even say that it is a *concept*, but must say that it is a *mere consciousness*, one that *accompanies every concept*. Now, as Kant argues further, this "I," or, if you prefer, this "*it*" (*the thing*) that thinks, takes us no further than the representation of a transcendental subject of thoughts = x, a subject which is known only through the thoughts that are its predicates, and of which, taken in isolation, we cannot *ever* have *the least concept*. This "I" has the associated *inconvenience* that, as Kant expresses it, in order to judge anything about it, *we must* every time *already make use of it*, for it is not so much *one representation* by which a particular object is distinguished, as it is rather a *form* of representation in general, in so far as representation can be said to be cognition. – Now *the paralogism* that rational psychology incurs, as Kant expresses it, consists in this: that *modes* of self-consciousness in thinking are converted into *concepts of the understanding*, as if they were the concepts of an *object*; that that "I think" is taken to be a *thinking being*, a *thing-in-itself*; that in this way, because I am present in consciousness always as a *subject*, am indeed as a *singular subject*, *identical* in all the manifoldness of representation, and distinguishing myself from this manifoldness as external to it, the illegitimate inference is thereby drawn that I am a *substance*, and a qualitatively *simple being* on top of that, and a *one*, and a being that *concretely exists independently* of the things of space and time.[21]

[20] A343/B401ff. [21] B406–409.

I have cited this position in some detail because one can clearly recognize in it both the nature of the former *metaphysics of the soul* and also, more to the point, of the *Critique* that put an end to it. – The former was intent on determining the *abstract essence* of the soul; it went about this starting from observation, and then converting the latter's empirical generalizations, and the determination of purely *external* reflection attaching to the singularity **12.194** of the actual, into the form of the *determinations of essence* just cited. – What Kant generally has in mind here is the state of the metaphysics of his time which, as a rule, stayed at these one-sided determinations with no hint of dialectic; he neither paid attention to, nor examined, the genuinely *speculative* ideas of older philosophers on the concept of spirit. In his *critique* of those determinations he then simply abided by the Humean style of skepticism; that is to say, he fixes on how the "I" appears in self-consciousness, but from this "I," since it is its essence (*the thing in itself*) that we want to cognize, he removes everything empirical; nothing then remains but this appearance of the "I think" that accompanies all representations and of which we do *not have the slightest concept*. – It must of course be conceded that, as long as we are not engaged in *comprehending* but confine ourselves to a simple, fixed representation or to a name, we do not have the slightest concept of the "I," or of anything whatever, not even of the concept itself. – Peculiar indeed is the thought (if one can call it a thought at all) that I must *make use* of the "I" in order to judge the "I." The "I" that *makes use* of self-consciousness as a means in order to judge: this is indeed an x of which, and also of the relation involved in this "making use," we cannot possibly have the slightest concept. But surely it is laughable to label the nature of this self-consciousness, namely that the "I" thinks itself, that the "I" cannot be thought without the "I" thinking it, an *awkwardness* and, as if it were a fallacy, a *circle*. The awkwardness, the circle, is in fact the relation by which the eternal nature of self-consciousness and of the concept is revealed in immediate, empirical self-consciousness – is revealed because self-consciousness is precisely *the existent* and therefore *empirically perceivable* pure *concept*; because it is the absolute self-reference that, as parting judgment, makes itself into an intended object and consists in simply making itself thereby into a circle. – This is an *awkwardness* that a stone does not have. When it is a matter of thinking or judging, the stone does not stand in its own way; it is dispensed from the burden of making use of itself for the task; something else outside it must shoulder that effort.

The defect, which these surely barbarous notions place in the fact that in thinking the "I" the latter cannot be left out as a subject, then also appears the other way around, in that the "I" occurs *only* as the *subject of*

consciousness, or in that I can *use* myself only as a *subject*, and no *intuition* is available by which the "I" would be *given* as an *object*; but the concept of a thing capable of existence only as a subject does not as yet carry any objective reality with it. – Now if external intuition as determined in time
12.195 and space is required for objectivity, and it is this objectivity that is missed, it is then clear that by objectivity is meant only sensuous reality. But to have risen above such a reality is precisely the condition of thinking and of truth. Of course, if the "I" is not grasped conceptually but is taken as a mere representation, in the way we talk about it in everyday consciousness, then it is an abstract self-determination, and not the self-reference that has itself for its subject matter. Then it is only *one* of the extremes, a one-sided subject without its objectivity; or else just an object without subjectivity, which it would be were it not for the awkwardness just touched upon, namely that the thinking subject will not be left out of the "I" as object. But as a matter of fact this awkwardness is already found in the other determination, that of the "I" as subject; the "I" does think *something*, whether itself or something else. This inseparability of the two forms in which the "I" opposes itself to itself belongs to the most intimate nature of its concept and of the concept as such; it is precisely what Kant wants to keep away in order to retain what is only a *representation* that does not internally differentiate itself and consequently, of course, is void of concept. Now this kind of conceptual void may well oppose itself to the abstract determinations of reflection or to the categories of the previous metaphysics, for in one-sidedness it stands at the same level with them, though these are in fact on a higher level of thought; but it appears all the more lame and empty when compared with the profounder ideas of ancient philosophy concerning the concept of the soul or of thinking, as for instance the truly speculative ideas of Aristotle.[22] If the Kantian philosophy subjected the categories of reflection to critical investigation, all the more should it have investigated the abstraction of the empty "I" that he retained, the supposed idea of the thing-in-itself. The experience of the awkwardness complained of is itself the empirical fact in which the untruth of that abstraction finds expression.

The Kantian critique of rational psychology only refers to Mendelssohn's proof of the persistence of the soul,[23] and I now also cite its refutation of that proof because of the oddness of what it adduces against it. Mendelssohn's proof is based on the *simplicity* of the soul, by virtue of which it is supposed

[22] *De anima*, 402a–435b.

[23] Cf. B413ff. Mendelssohn's proof is in the *Phädon: oder Über die Unsterblichkeit der Seele. In drei Gesprächen* (1767 and 1784). See Moses Mendelssohn, *Gesammelte Werke, Jubiläumsausgabe, Schriften zur Philosopie und Ästhetik*, Vol.III.1 (Berlin: Akademie Verlag, 1932).

to be incapable of alteration in time, *of transition into an other*. Qualitative simplicity is in general the form of *abstraction* earlier considered; as *qualitative* determinateness, it was investigated in the sphere of being and it was then proved that the qualitative, which is as such abstractly self-referring determinateness, is precisely for that reason dialectical, mere transition into an other.[24] In the case of the concept, however, it was shown that, when considered in connection with persistence, indestructibility, imperishableness, it is that which exists for itself, which is eternal, just because it is not *abstract* but *concrete* simplicity – because it is not a determinateness that **12.196**
refers to itself abstractly but is the unity *of itself and its other*, and it cannot therefore pass over into this other as if it thereby altered in it; it cannot precisely because it is itself the *other*, the determinateness, and hence in this passing over it only comes to itself.[25] – Now the Kantian critique opposes to this *qualitative* determination of the unity of the concept a quantitative one. As it says, although the soul is not a manifold of reciprocally external parts and contains no *extensive* magnitude, yet consciousness has *a degree*, and the soul, like *every concretely existing being*, is an *intensive magnitude*; with this magnitude, however, there is posited the possibility of a transition into nothing through *gradual vanishing*.[26] – Now what is this refutation but the application to spirit of a category *of being*, of *intensive magnitude* – a determination that has no truth in itself but on the contrary is sublated in the concept?

Metaphysics – even one that restricted itself to the fixed concepts of the understanding without rising to speculation, to the nature of the concept and of the idea – did have for its aim *the cognition of truth*; it did probe its subject matter to ascertain whether they were *something true* or not, whether substances or phenomena. The triumph of the Kantian critique over this metaphysics consists, on the contrary, in side-lining any investigation that would have *truth* for its aim and this aim itself; it simply does not pose the one question which is of interest, namely whether a determinate subject, in this case the *abstract "I" of representation*, has truth in and for itself. But to stay at appearances and at the mere representations of ordinary consciousness is to give up on the concept and on philosophy. Anything beyond that is branded by the Kantian critique as high-flown, something to which reason has no claim. As a matter of fact, the concept does fly high, rising above what has no concept, and the immediate justification for going beyond it is, for one thing, the concept itself, and, for another,

[24] Cf. GW 11, 72; above 21.111(bottom of page)–112. But this is a place where the 1832 edition varies considerably from that of 1812.
[25] Cf. above, 12.34. [26] B414.

on the negative side, the untruth of appearance and of representation, and also of such abstractions as the thing-in-itself and the said "I" which is not supposed to be an object to itself.

In the context of this logical exposition, it is from the *idea of life* that the idea of spirit has emerged, or what is the same thing, that has demonstrated itself to be the truth of the idea of life. As this result, the idea possesses its truth in and for itself, with which one may then also compare the empirical reality or the appearance of spirit to see how far it accords with it. We have seen regarding *life* that it is the idea,[27] but at the same time it has shown itself not to be as yet the true presentation or the true mode of its existence. For in life, the reality of the idea is *singularity*; *universality* or the genus is the *inwardness*. The truth of life as absolute negative unity
12.197 consists, therefore, in this: to sublate the abstract or, what is the same, the immediate singularity, and as *identical* to be self-identical, as genus, to be self-equal. Now this idea is *spirit*. – In this connection, we may further remark that spirit is here considered in the form that pertains to this idea as logical. For the idea also has other shapes which we may now mention in passing; in these it falls to the concrete sciences of spirit to consider it, namely as *soul*, *consciousness, and spirit as such*.

The name "soul" was used formerly to mean singular finite spirit in general, and rational or empirical *psychology* was supposed to be synonymous with *doctrine of spirit*. The expression, "soul," evokes an image of it as if it were a *thing* like other things. One enquires regarding its *seat*, the spatial location from which its *forces* operate; still more, how this thing can be *imperishable*, subjected to the conditions of *temporality* yet exempt from alteration in it. The system of *monads* elevates matter by making all of it in principle a soul;[28] on this way of representing it, the soul is an atom like the atoms of matter; the atom that rises from a cup of coffee as vapor is capable in favorable circumstances of developing into a soul; only the *greater* obscurity of its ideation distinguishes it from the kind of thing that is manifestly soul. – The concept *that is for itself* is necessarily also in *immediate existence*; in this substantial identity with life, immersed in its externality, the concept is the subject matter of *anthropology*. But even anthropology would find alien a metaphysics in which this form of *immediacy* is made into a *soul-thing*, into an atom like the atoms of matter. – To anthropology must be left only that obscure region where spirit, under influences which were once called *sidereal* and *terrestrial*, lives as a natural spirit in *sympathy* with nature and has presentiments of the latter's

[27] Cf. above, 12.191. [28] *zur Seelenhaftigkeit*.

alterations in *dreams* and *presentiments*, and indwells the brain, the heart, the liver, and so forth. To the liver, according to Plato, God gave the gift of prophesy above which the self-conscious human is exalted, so that even the irrational part of the soul would be provided for by his bounty and made to share in higher things.[29] To this irrational side belongs further the behavior of figurative representation, and of higher spiritual activity in so far as the latter is subject to the play of an entirely corporeal constitution, of external influences and particular circumstances.

This lowest of the concrete shapes in which spirit is sunk into materiality[30] has the one immediately superior to it in consciousness. In this form the free concept, as the "*I*" *existing for itself*, is withdrawn from objectivity, but it refers to the latter as *its other*, a subject matter that confronts it. Since spirit is here no longer as soul, but, in the *certainty* that it **12.198**
has of itself, the *immediacy of being* has for it the significance rather of *a negative*, its identity with itself in the objectivity confronting it is at the same time still only a *reflective shining*, for that objectivity still also has the form of a *being that exists in itself*. This stage is the subject matter of *the phenomenology of spirit* – a science that stands midway between the science of the natural spirit and of the spirit as such. It considers spirit as it exists *for itself*, but at the same time as *referring to its other* – an other which, as we have just said, is thereby determined both as an object existing *in itself* and as a negative. The science thus considers spirit as *appearing*, as exhibiting itself in its contrary.

But the higher truth of this form is *spirit for itself*. For this spirit, the subject matter[31] which for consciousness exists *in itself* has the form of its own determination, the form of *representation* in general; this spirit, which acts on the subject matter's determinations as on its own, on feelings, on representations and thought, is thus infinite in itself and in its form. The consideration of this stage belongs to the *doctrine of spirit* proper, which would embrace the subject matter of ordinary *empirical psychology* but which, in order to be the science of spirit, must not go about its work empirically but must be conceived scientifically. – At this stage spirit is *finite* spirit in so far as the *content* of its determinateness is an immediately given content; the science of this finite spirit has to display the course along which it liberates itself from this determinateness and goes on to grasp its truth, the infinite spirit.

The *idea of spirit* which is the subject matter of *logic* already stands, on the contrary, inside pure science; it has no need, therefore, to observe

[29] *Timaeus*, 71d–e. [30] *Materiatur*. [31] *Gegenstand*.

spirit's tracing that course, to see how it gets entangled with nature, with immediate determinateness, with matter, or in other words with pictorial representation; this is what the other three sciences investigate. The idea of spirit has this course already behind it, or what is the same, it has it rather ahead of it – behind in so far as logic is taken as *the final* science; ahead in so far as it is taken as *the first science* from which the idea first passes over into nature. In the logical idea of spirit, therefore, the "I" is from the start in the way it has emerged from the concept of nature as the truth of nature, the free concept which in its judgment is itself the subject matter confronting it, *the concept as its idea*. Also in this shape, however, the idea is still not consummated.

Although the idea is indeed the free concept that has itself as its subject matter, it is nonetheless *immediate*, and just because it is immediate, it is still the idea in its *subjectivity*, and hence in its finitude in general. It is the *purpose* that ought to realize itself, or the *absolute idea* itself still in its
12.199 *appearance*. What the idea *seeks* is the *truth*, this identity of the concept itself and reality; but at first it only *seeks* it; for it is here as it is *at first*, still something *subjective*. Consequently, although the subject matter that is for the concept is here also a given subject matter, it does not enter into the subject as affecting it, or as confronting it with a constitution of its own as subject matter, or as a pictorial representation; on the contrary, the subject transforms it into a *conceptual determination*; it is the concept which is the active principle in it – which therein refers itself to itself, and, by thus giving itself its reality in the object, finds *truth*.

Initially, therefore, the idea is one extreme of a syllogism, the concept that as purpose has itself at first for its subjective reality; the other extreme is the restriction of the subjective, the objective world. The two extremes are identical in that they are the idea. Their unity is, first, that of the concept, a unity which in the one extreme is only *for itself* and in the other only *in itself*. Second, it is reality, abstract in the one extreme and in the other in its concrete externality. – This unity is now *posited* through cognition, and, because the latter is the subjective idea which as purpose proceeds from itself, it is at first only a *middle term*. – The knowing subject, through the determinateness of its concept which is the abstract being-for-itself, refers to an external world; nevertheless, it does this in the absolute certainty of itself, in order to elevate its implicit reality, this formal truth, to real truth. It has the *entire essentiality* of the objective world in its concept; its process consists in positing for itself the concrete reality of that world as identical with the *concept*, and conversely in positing the latter as identical with objectivity.

Immediately, the idea of appearance is the *theoretical idea*, cognition as such. For to the concept that exists for itself, the objective world immediately has the form of *immediacy* or of *being*, just as that concept is to itself at first only the abstract concept of itself, is still shut up within itself. The concept is therefore only as *form*, of which only its simple determinations of *universality* and *particularity* are the reality that it possesses within, while the singularity or the *determinate determinateness*, the content, is received by it from the outside.

A. THE IDEA OF THE TRUE

At first the subjective idea is *impulse*. For it is the contradiction of the concept that it has itself for the *subject matter* and is to itself the reality without, however, the subject matter being an *other* that subsists on its own over against it, or without the differentiation of itself from itself having at the same time the essential determination of *diversity* and of **12.200**
indifferent existence. The specific nature of this impulse is therefore to sublate its own subjectivity, to make that first abstract reality a concrete one, filling it with the *content* of the world presupposed by its subjectivity. – From the other side, the impulse is determined in this way: the concept is indeed the absolute certainty of itself; however, opposite its *being-for-itself* there stands its presupposition of a world that exists *in itself*, but one whose indifferent *otherness* has for the concept's certainty of itself the status of something merely *unessential*; the concept is therefore the impulse to sublate this otherness and, in the object, to intuit its identity with itself. This immanent reflection is the sublated opposition and the *singularity* that originally makes its appearance as the presupposed *being-in-itself* but is now *posited* and made actual for the subject; accordingly, this being-in-itself is the self-identity of the form as it has issued from the opposition – an identity which is therefore determined as indifferent towards the form in its differentiation. It is *content*.

Consequently this impulse is the impulse of *truth* in so far as the truth is in *cognition*, and therefore of *truth* in its strict sense as *theoretical* idea. – Although *objective* truth is the idea itself as the reality that corresponds to the concept, and to this extent a subject matter may or may not possess truth, nevertheless the more precise meaning of truth is that it is such *for* or *in* the subjective concept, *in knowledge*.[32] Truth is the relation of the *judgment of the concept*, the concept that proved to be the formal judgment

[32] *Wissen*.

of truth;[33] for the predicate in this judgment is not only the objectivity of the concept, but the comparison connecting the concept of the fact with the actuality of it. – This realization of the concept is *theoretical* in so far as the concept still has, as *form*, the determination of *subjectivity*, or in so far as it has for the subject the determination of being its own determination. Because cognition is the idea as purpose or as subjective idea, the negation of the world, presupposed as *existing in itself*, is the *first* negation; the conclusion in which the objective is posited in the subjective has at first, therefore, only the meaning that what exists in itself is *posited* only as something subjective, only in conceptual determination, and consequently does not exist as so posited in and for itself. Thus the conclusion only attains to a *neutral* unity, or a *synthesis*, that is, to a unity of terms that are originally separate, only externally conjoined. – Hence, since in this cognition the concept posits the object as *its own*, the idea gives itself at first only a content of which the foundation is *given*, in which only the form of externality has been sublated. To this extent, this cognition still retains its *finitude* in its realized purpose; in the realized purpose, it has at the same time *not* attained its purpose, and *in its truth* it has not arrived at the *truth*. For in so far as in the result the content still has the determination
12.201 of a *given*, the presupposed *being-in-itself* confronting the concept is not sublated; the unity of concept and reality, the truth, is thereby equally not contained in it. – Remarkable is that this side of *finitude* is the one that of late has been clung to and accepted as the *absolute* relation of cognition – as if the finite as such were to be the absolute! On this view, an unknown *thinghood-in-itself* is attributed to the object, *behind* cognition, and this thinghood, and the truth also along with it, are regarded for cognition as an absolute *beyond*. Thought determinations in general, the categories, the determinations of reflection, as well as the formal concept and its moments, acquire on this view the status of determinations that are finite, not in and for themselves, but in the sense of being something subjective as against this empty *thinghood-in-itself*; the fallacy of taking this untrue relation of cognition as the true relation has become the universal opinion of modern times.

It is immediately clear from this definition of finite cognition that it is a contradiction that sublates itself; it is the contradiction of a truth that is supposed at the same time not to be truth, of a cognition of what *is* that at the same time does not know the thing-in-itself. In the collapse of this contradiction, its content, subjective cognition and the thing-in-itself,

[33] Cf. above, 12.88.

collapses, that is, proves itself to be an untruth. But it is incumbent upon cognition itself to resolve its finitude by its own forward movement and along with it its contradiction. What we have said is a consideration which we bring to it and remains a reflection external to it. But cognition is itself the concept which is a purpose unto itself and, therefore, through its realization fulfills itself, and precisely in this fulfillment sublates its subjectivity and the presupposed being-in-itself. – We must examine cognition, therefore, in its positive activity within it. Because this idea, as we have shown,[34] is the concept's impulse to realize itself *for itself*, its activity consists in determining the object, and by virtue of this determining to refer itself to itself in it as identical. The object is simply the determinable as such, and in the idea it has this essential side of not being in and for itself opposed to the concept. Because this cognition is still finite, not speculative cognition, the presupposed objectivity does not as yet have for it the shape of something which is inherently the concept simply and solely and does not hold anything particular for itself as against the cognition. But by thus having the status of a beyond that exists in itself, the determination of *being determinable through the concept* is essential to it; for *the idea* is the concept that exists for itself, is that which is absolutely infinite in itself, in which the object is *implicitly* sublated, and the aim is still to sublate it *explicitly*. The object, therefore, is indeed presupposed by the idea of cognition as *existing in itself*, but as so essentially related to the idea that the latter, certain of itself and of the nothingness of this opposition, arrives in the object at the realization of its concept. **12.202**

In the syllogism whereby the subjective idea now rejoins objectivity, the *first premise* is the same form of immediate seizure and connection of the concept with respect to the object as we see in the purposive connection.[35] The determining activity of the concept upon the object is an immediate *communication* of itself to the object, an unresisted *invasion* of it. In all this the concept remains in pure self-identity; but this immediate immanent reflection equally has the determination of objective immediacy; that which *for the concept* is its own determination, is equally a *being*, for it is the *first* negation of the presupposition. The posited determination equally has the status, therefore, of a presupposition which is merely *found*, the apprehension of a *given* wherein the activity of the concept consists rather in being negative towards itself, in holding itself back away from what is found and passive towards it, in order that the latter be allowed to *show* itself, not as determined by the subject, but as it is in itself.

[34] Cf. above, 12.199. [35] Cf. above, 12.164.

In this premise, therefore, this cognition does not in any way appear as an *application* of logical determinations, but as a reception and apprehension of such determinations as already found, and its activity appears restricted simply to the removing from the subject matter of a subjective obstacle, an external veil. This cognition is *analytic* cognition.

a. Analytic cognition

The difference between analytic and synthetic cognition is sometimes said to be that the one proceeds from the known to the unknown and the other from the unknown to the known. On closer examination, however, it is difficult to find any definite thought behind this difference, even less a concept. It may be said that in general cognition begins with ignorance, for one does not learn to know something with which one is already acquainted. Conversely, it also begins with the known, for it is a tautological proposition that that with which cognition begins, what it therefore actually knows, is for that reason a known; what is as yet not known, and is expected to be known only later, is still an unknown. In this respect it must be said that cognition, once it has begun, always proceeds from the known to the unknown.

The specific difference of analytic cognition is already established by the fact that, since it is the first premise of the whole syllogism, mediation does not as yet belong to it; analytic cognition is rather the immediate communication of the concept, a communication that does not as yet
12.203 contain otherness and in which activity divests itself of its negativity. Yet this immediacy of the connection is for that reason itself mediation, for it is a negative reference of the concept to the object that annuls itself and thereby makes itself simple and identical. This immanent reflection is only subjective, because in its mediation the difference is present still in the form of a presupposition *existing in itself*, as the *object's* difference[36] within itself. The determination that results through this connection, therefore, is the form of simple *identity*, of *abstract universality*. Accordingly, analytic cognition has in general this identity for its principle, and the transition into an other, the linking of different terms is excluded from it and from its activity.

If we look now more closely at analytic cognition, we see that it starts from a *presupposition*, hence from some singular, *concrete* subject matter, whether for representation this subject matter is already *completed* or in

[36] *Verschiedenheit.*

the form of a *task*, that is, given to it only under certain circumstances and conditions rather than disengaged from these on its own and presented in simple independence. Now the analysis of this subject matter cannot consist just in *resolving* it into the particular *representations* possibly contained within it; such a resolution and the apprehension of the particular representations is an affair that would not belong to cognition, but would rather be a matter of closer acquaintance, a determination within the sphere of *representing*. Analysis, since it is based on the concept, has for its products determinations that are essentially conceptual, though such as are *contained* in the subject matter *immediately*. We have seen from the nature of the idea of cognition that the activity of the subjective concept must be regarded from one side only as the *explication of what is already in the object*,[37] for the object itself is nothing but the totality of the concept. It is just as one-sided to portray analysis as though there were nothing in the subject matter that is not *imported* into it, as it is to suppose that the resulting determinations are only *extracted* from it. The former way of stating the case corresponds, as is well known, to subjective idealism, which takes the activity of cognition in analysis to be only a one-sided *positing*, beyond which the *thing-in-itself* remains hidden. The other way belongs to the so-called realism, for which the subjective concept is an empty identity that *imports* the thought determinations *from outside*. – Since analytical cognition, the transformation of the given material into logical determinations, has shown itself to be a *positing* that immediately determines itself to be equally a *presupposing*, to be both in one, the logical element can appear on account of this presupposing to be in the subject matter as something already *completed*, just as because of the positing it can appear as the *product* of a merely subjective activity. But the two moments **12.204**
are not to be separated. In the abstract form to which analysis raises it, the logical element is of course only to be found in cognition, just as conversely it is not only *something posited* but something that rather *exists in itself*.

Now in so far as analytical cognition is the indicated transformation, it does not go through further *middle terms*; on the contrary, the determination is to that extent *immediate* and has precisely the meaning of being the subject matter's own determination, of belonging to it in itself, and therefore of being apprehended directly from it without subjective mediation. But further, cognition is also supposed to be a *progress*, an *explication* of *differences*. But because, according to the determination that it has here,

[37] Cf. above, 12.199.

it is void of concept and undialectical, it only possesses a *given difference*, and its progression happens solely in the determinations of the *material*. It seems to have an *immanent* progress only in so far as the derived thought determinations can in turn be analyzed, in so far as they are still something concrete; the highest and final term of this analyzing is the abstract highest essence – or the abstract subjective identity and, over against it, the difference. This progress, however, is nothing but just the repetition of the one original activity of analysis, namely, the re-determination as a *concretion* of what has already been taken up in abstract conceptual form, and following upon that the analysis of this concretion, and then again the renewed determination of the resulting abstraction as concrete, and so forth. – But the thought determinations also seem to contain a transition in themselves. If the subject matter is defined as a whole, then of course one advances from it to the *other* determination of *part*; from *cause* to the other determination of *effect*, and so forth. But this is no progress, for part and whole, cause and effect, are *relations* – indeed, in the context of this formal cognition they are such *consummate* relations that the one determination is *already found* essentially linked to the other. The subject matter that has been determined whether as *cause* or as *part* is thus determined by the *whole* relation, already by both sides of it. Although this relation is *in itself* something synthetic, this connection is for analytical cognition just as much of a mere *given* as is any other connection in its material, and therefore outside its sphere of competence. Whether this connection is otherwise determined as *a priori* or *a posteriori* is here indifferent, for it is apprehended as *already given*, or, as it has also been called, as a *fact* of consciousness – namely the fact that with the determination of *whole* there
12.205 is linked the determination of *part*, and so on. Kant made the profound observation that there are *synthetic* principles *a priori*, and he recognized as their root the unity of self-consciousness, hence the self-identity of the concept.[38] However, he takes the *specific* connection, the relational concepts, and the synthetic principles, *from formal logic* as *given*; the deduction of these should have been the exposition of the transition of that simple unity of self-consciousness into these determinations and distinctions; but Kant spared himself the effort of demonstrating this truly synthetic progression, that of the self-producing concept.

It is well known that "analytical science" and "analysis" are the names of preference of *arithmetic* and the *sciences of discrete magnitude* in general. And in fact their typical method of cognition is most immanently

[38] A154–155, 158/B194, 197.

analytical and we must now briefly consider why this is so. – Any other analytical cognition begins from a concrete material that has an accidental manifoldness within; every distinction of content and every advance to further content depend on this material. The material of arithmetic and of algebra is, on the contrary, an already totally abstract and indeterminate product from which every peculiarity of relation has been eliminated, and to which, therefore, every determination and every joining is something external. This product is the principle of discrete magnitude, the *one*. This relationless atom can be increased to a *plurality* and externally determined and unified into a sum; the increasing and the limiting are an empty progression and an empty determining that never gets past the same principle of the abstract one. How the *numbers* are further combined and separated depends solely on the positing activity of the knowing subject. *Magnitude* is in general the category within which these determinations are conducted; it is the determinateness that has become *indifferent*, so that the subject matter has no determinateness which is immanent to it and is therefore *given* to cognition. Since cognition has from the start provided itself with an accidental assortment of numbers, these now constitute the material for further elaboration and manifold relations. Such relations, their discovery and elaboration, do not seem, it is true, to be anything immanent in analytical cognition, but seem rather something accidental and given; moreover, these same relations and the operations connected with them are also routinely conducted *one after the other*, as *diverse*, with no notice of any internal connectedness. But it is easy to recognize the presence of a guiding principle; it is none other than the immanent principle of analytical identity, an identity that in diversity appears as *equality*; progression is the reduction of the unequal to ever greater equality. To give an example **12.206**
from the first elementary operations, addition is the combining of quite accidentally *unequal* numbers; multiplication, on the contrary, is the combination of *equal* numbers, upon which there then follows the relation of *equality* of *number of times* and *unit*, and the relation of powers then comes in.

Now because the determinateness of the subject matter and of the relations is a *posited one*, any further operation with them is also wholly analytic; accordingly, analytical science has not so much *theorems* as it has *problems*. The analytical theorem contains the problem as already resolved on its own terms; the wholly external distinction that attaches to the two sides which it equates is so unessential that, as theorem, it would appear to be a trivial identity. To be sure, Kant has declared the proposition $5 + 7 = 12$ to be *synthetic*, because the same is exhibited on the one side in the form

of a plurality, 5 + 7, and on the other in the form of a unity, 12.[39] But, if the analytic proposition is to mean more than just the totally abstract identity and tautology of 12 = 12 and is to contain any progression within it at all, then there must be present some sort of distinction, though not one based on a quality, on a reflective and still less conceptual determinateness. 5 + 7 and 12 are absolutely the very same content; but the first side also expresses the *demand* that 5 and 7 be combined into *one* expression, that is to say, that just as 5 is the product of a process of counting that was arbitrarily interrupted but might just as well have been carried farther, so now the counting is to be resumed as before with the stipulation that the ones to be added should be seven. The 12 is therefore the result of 5 and 7 and of a pre-set operation which is by nature also a completely external and thoughtless act, one that a machine can also therefore perform. Here there is not the slightest transition to an *other*; what there is, is the mere continuation, that is, the *repetition*, of the same operation that produced 5 and 7.

The *proof* of a theorem of this kind – and it would require a proof if it were a synthetic proposition – would consist simply in the operation of continuing counting, starting from 5, up to 7 as the pre-determined limit, and in the recognition of the agreement of the product of this counting with what is otherwise called 12, a figure which is again nothing more than that same counting up to a determined limit. For this reason we state the proof in the form of a *problem* rather than a theorem as a matter of course. We *demand* to perform an operation, that is to say, we state only *one* side of the equation that would constitute the theorem and whose other side is now to be found. The problem contains the content and assigns the specific operation to be performed with it. The operation is not constrained by any recalcitrant material endowed with specifying relations, but is rather an external subjective act, the determinations of which are
12.207 received with indifference by the material where they are posited. The whole difference between the conditions stipulated in the problem and the result in the *solution* is only this, that the union or separation as stipulated in the problem is *actual* in the solution

It is, therefore, a supremely superfluous piece of scaffolding to apply here the form of geometrical method that goes with synthetic propositions, and to add to the problem, over and above the solution, a *proof* as well. Such a proof can express no more than the tautology that the solution is correct because the prescribed operation has been performed. If the problem is to

[39] B15ff.; A164/B205.

add several numbers, then the solution is to add them; the proof shows that the solution is correct because addition was prescribed and addition was performed. If the problem involves more complex expressions and operations, as for instance the multiplication of decimal numbers, and the solution only states the mechanical procedure, a proof will then indeed be necessary; but it can consist in nothing more than the analysis of the expressions and of the operation from which the solution proceeds of itself. By this separation of the *solution* as a mechanical procedure, and of the *proof* as a reminder of the nature of the subject matter to be treated and of the operation itself, we lose precisely the advantage of the analytic problem, namely that the *construction* can be derived directly from the problem and presented, therefore, as *intelligible* in and for itself; in the other way, the construction is expressly given a defect which is typical of the synthetic method. – In higher analysis, especially in connection with the relations of powers, where qualitative relations of discrete magnitudes dependent on conceptual determinacies come into play, the problems and the theorems do of course contain synthetic determinations; in these cases, *other* expressions and relations than are *given* by the problem or theorem must be taken as intermediary links. But here also, the determinations enlisted as an aid must be such as to be based on recalling or developing one side or other of the problem or theorem; the look of synthesis comes solely from the fact that the problem or theorem has not as yet already identified that side. – For instance, the problem of finding the sum of the powers of the roots of an equation is solved through the examination and then the joining of the functions that are the coefficients of the equation of the roots. The determination of the functions of these coefficients and their link here enlisted as an aid is not already expressed in the problem, but for the rest the development is totally analytical. The same applies to the solution of the equation $x^m - 1 = 0$ with the aid of the sine, and also to its immanent algebraic solution, famously discovered by Gauß, which takes **12.208** into consideration as an aid the *residuum* of $x^{m-1} - 1$ divided by 1, and the so-called primitive roots – one of the most important extensions of analysis in modern times.[40] These solutions are synthetic, for the determinations enlisted in their aid, the sine or the examination of the residua, are not a determination of the problem itself.

We gave in *the first part* of this Logic a detailed account of the nature of the analysis which is dedicated to the so-called infinite differentiations

[40] Carl Friedrich Gauss (1777–1855), a German mathematician and scientist who is widely regarded as one of the greatest figures in the history of mathematics. His most important work was the *Disquisitiones arithmeticæ*.

of variable magnitudes, the analysis of differential and integral calculus.[41] It was shown there that underlying this analysis there is a fundamental qualitative determination of magnitude that can be comprehended only by the concept.[42] The transition to this determination from magnitude as such is no longer analytic; to this day, therefore, mathematics has been incapable of justifying internally, that is, mathematically, the operations based on it, for the transition is not of a mathematical nature. We said in the same place that Leibniz, famed for having rendered the calculation of infinitesimals into a calculus, executed that transition in a way which is utterly deficient, just as totally void of concept as unmathematical.[43] But of course, once the transition is presupposed – and in the present state of the science it is no more than a presupposition – the further course is only a series of ordinary analytical operations.

We have said that analysis becomes synthetic when it comes to *determinations* that are no longer *posited* by the problems themselves. But the general transition from analytic to synthetic cognition lies in the necessary transition from the form of immediacy to mediation, from abstract identity to difference. Analysis in general restricts its activity to determinations in so far as these are self-referential; yet by virtue of their *determinateness* they also essentially *refer to an other* by nature. We have already remarked that analytic cognition remains such even when it advances to relations that are not an externally given material but are rather thought determinations, since for it these relations are also *given*. But because the abstract identity which this cognition knows to be solely its own is essentially an *identity in difference*,[44] even as such it must be cognition's own identity, and the *connection* as well must become for the concept one which is posited by it
12.209 and is identical with it.

b. Synthetic cognition

Analytic cognition is the first premise of the whole syllogism – the *immediate* reference of the concept to the object. *Identity* is, therefore, the determination which analytic cognition recognizes as its own, and analytic cognition is the *apprehension* of what *is*. Synthetic cognition aims at the

[41] Hegel is referring to Volume One of Part One, "The Doctrine of Being" in its 1812 edition, cf. GW 11, the Remark on pp. 153–178. He gave an even more extensive treatment in the 1832 edition. Cf. above, the three Remarks in 21.236–309.

[42] GW 11, 157; cf. above 21.241. [43] Cf. GW 11, 168; cf. above 21.256, 260.

[44] *Identität des Unterschiedenen*.

comprehension of what *is*, that is, at grasping the manifoldness of determinations in their unity. It is, therefore, the second premise of the syllogism, the one in which the *diverse* as such is connected. Its aim, therefore, is *necessity* in general. – The diverse terms that are combined stand, on the one hand, in a *relation* in which they are both connected yet mutually indifferent and self-subsistent; but, on the other hand, they are linked together in the *concept* which is their simple yet determinate unity. Now inasmuch as in a first moment synthetic cognition passes over from *abstract identity* to relation, or from *being* to *reflection*, it is not the absolute reflection of the concept that the latter recognizes in its subject matter; the reality that the concept gives itself is the next stage,[45] namely the said identity in diversity as such, an identity that equally is, therefore, still *inner*, and only necessity; it is not the subjective identity existing for itself, hence not as yet the concept as such. Synthetic cognition, therefore, does also have for its content the determinations of the concept, the object is posited in them; but they stand only in *relation* to one another or in *immediate* unity, and for that very reason not in the unity by which the concept exists as subject.

This is what constitutes the finitude of this cognition. Because the identity which this real side of the idea has in it is still an *inner* one, the determinations of that identity are still *external* to themselves; and because the identity is not as subjectivity, the concept's own specific presence in the subject matter still lacks singularity; although what in the object corresponds to the concept is no longer the abstract but the determinate form of the concept and hence the concept's *particularity*; the *singularizing element* in the object is nevertheless still *a given content*. Consequently, although this cognition transforms the objective world into concepts, what it gives to it in accordance with conceptual determinations is only the form; as for the object in its *singularity*, in its determinate determinateness, this it must *find*; the cognition is not yet self-determining. It likewise *finds* propositions and laws, and proves their *necessity*; but it proves the latter not as a necessity inherent in a fact in and for itself, that is to say, it does not demonstrate it from the concept; it proves it rather as the necessity inherent to a cognition that delves into given determinations, into phenomenal differences, and cognizes *for itself* the proposition as a unity and relation, or cognizes the **12.210** ground of *appearance* from the appearance itself.

We must now examine the detailed moments of synthetic cognition.

[45] *die nächste Stufe*.

1. Definition

To start with, the still given objectivity is transformed into simple form, as the first form and therefore as the form *of the concept*; the moments of this apprehension are none other, therefore, than the moments of the concept; *universality*, *particularity*, and *singularity*. – The *singular* is the object itself as an *immediate representation*; it is that which is to be defined. The universal of this singular object took the form of *genus* in the determination of the objective judgment, or the judgment of necessity;[46] more precisely, it took the form of the *proximate* genus, that is to say, of the universal with the determinateness which is at the same time the principle for the differentiation of the particular. This is a difference that the subject matter receives in its *specific non-indifference*,[47] the one that makes it a determinate species and is the basis of its disjunction from the remaining species.

Definition, in thus reducing the subject matter to its *concept*, gets rid of the externalities that are requisite for its concrete existence; it abstracts from what is added to the concept in its realization, whereby the concept issues first into idea and secondly into external concrete existence. *Description* is for *representation*; it collects this extra content that belongs to reality. But definition reduces this wealth of manifold determinations of the intuited existence to its simplest moments; what is contained in the concepts are the form of these simple elements and how they are determined with respect to one another. The subject matter is thus apprehended, as we just said, as a universal which is determined at the same time. The subject matter is the third, the singular in which genus and particularization are posited in one – an *immediate* which is posited *outside* the concept, for it is not yet self-determining.

In these determinations, in the difference of form of the definition, the concept finds itself; there it finds the reality that corresponds to it. But since the reflection of the moments of the concept into themselves which is singularity is not as yet contained in this reality, and since the object, in so far as it is in cognition, is consequently not as yet determined as subjective, it is cognition which, on the contrary, is subjective and has an external beginning; that is to say, because of its external beginning in a singular it
12.211 is subjective. The content of the concept is therefore something given and contingent. The concrete concept itself is thus contingent in two respects: once because its content is contingent; and again because it is a matter of accident which content determinations, from the many qualities which

[46] Cf. above, 12.82. [47] *Differenz* (see the explanation of the term in the Introduction).

the intended object has in external existence, are chosen for the concept as constituting its moments.

This last respect requires closer consideration. Since singularity is a determinate way of existing in and for itself, it escapes the conceptual determination proper of synthetic cognition. There is in fact no principle, therefore, for determining which aspects of the subject matter are to be regarded as belonging to its conceptual determination and which only to its external reality. In the case of definitions, this constitutes a difficulty which for synthetic cognition cannot be eliminated. A distinction must nonetheless be made here. – *In the first place*, so far as the products of self-conscious purposiveness are concerned, it is easy enough to discover their definition, for the purpose which they should serve is a determination that is generated by a subjective resolution and constitutes the essential particularization, the form of the concrete existent, on which alone everything depends here. The further nature of the material of the existent thing or its other external properties, in so far as they correspond to the purpose, are contained in the thing's determination; the rest are unessential for it.

Secondly, geometrical objects are abstract determinations of space; the underlying abstraction, the so-called absolute space, has lost all other concrete determinations and now possesses no further shapes and configurations than are posited in it; essentially, therefore, *such shapes and configurations are* only what they *are intended* to be; their conceptual determination in general, and more proximately their specific difference, have unfettered reality in them; in this respect, therefore, they are the same as the products of external purposiveness, and in this they also agree with the objects of arithmetic in which the underlying determination is also only one that has been posited in them. – Of course, space has yet further determinations: its tri-dimensionality, its continuity and divisibility which are not first posited in it by external determination. But these belong to the material under consideration and are immediate presuppositions; synthetic relations and laws are produced only through the combination and the interweaving of these subjective determinations with this distinctive nature of their field into which they have been imported. – In the case of number determinations, since they are based on the simple principle of the *one*, their combination and further determination is only an entirely posited product; on the other hand, determinations in space, which for its part is a continuous *externality*,[48] run a further course of their own and

[48] *Aussereinander*.

have a reality that exceeds their concept, but it no longer belongs to the
12.212 immediate definition.

But, *thirdly*, in the case of the definitions of *concrete* objects, of nature as well as of spirit, the situation is quite different. For representation, such subject matters are in general *things of many properties*. In their case all depends on apprehending what is their proximate genus, and then what is their specific difference. We have to determine, therefore, which of the many properties pertains to the subject matter as genus, which as species, and which among these properties is the essential one; this further involves recognizing how the properties hang together, whether one is already posited with the other. For this, however, no other criterion is yet available than *existence* itself. – For the definition, in which the property is to be posited as simple undeveloped determinateness, the essentiality of the property is its universality. But in existence this universality is empirical; it is a universality in time (whether the property persists while the rest ostensibly come and go within the permanence of the whole), or a universality resulting from comparison with other concrete wholes, in which case it does not get beyond commonality. Now if comparison gives as a common foundation the total *habitus*, such as is empirically given, then reflection must gather it together into one simple thought determination and grasp the simple character of the resulting totality. But the only possible attestation that a thought determination, or any single one of the immediate properties, constitutes the simple and determinate essence of the subject matter is its *derivation* from the concrete constitution of the latter. But this would require an analysis that transforms the immediate elements of this constitution into thoughts and reduces their concreteness to a simple thought determination; and this is an analysis of a higher order than the one just considered, for it would not be abstractive; on the contrary, in the universal it should still retain the singular character of the concrete, should unify it and show that it is dependent on the simple thought determination.

The connections of the manifold determinations of immediate existence to the simple concept would however require theorems, and these need proof. But definition is the first, still undeveloped concept, and in that it has to apprehend the simple determinateness of the subject matter, and this apprehension is to be something simple, it can employ for the purpose only one of the subject's *immediate* so-called properties, a determination of sensuous existence or of representation; the singling out, then, of this property through abstraction is what constitutes the simplicity, and for universality and essentiality the concept must resort to empirical universality, to persistence under altered circumstances and to the reflection

that seeks the determination of the concept in external existence and in pictorial representation – seeks it, that is, where it is not to be found. – Defining, therefore, by its own doing also forfeits the true concept determinations that would by essence be the principles of the subject matter, **12.213** and contents itself with *marks*, that is, determinations in which that they are *essential* to the subject matter is a matter of indifference and whose only purpose is rather to be *markers* for external reflection. – Any such single, *external* determinateness is too disproportionate with respect to the concrete totality and to the nature of its concept to justify its being singled out or to assume that a concrete whole would find in it its true expression and determination. – For example, as Blumenbach observes, the lobe of the ear is something lacking to all other animals and is therefore perfectly entitled, in accordance with ordinary ways of speaking about common and distinguishing markers, to be used as the distinctive characteristic in the definition of the physical human being.[49] But how disproportionate such a totally external determination at once appears when measured against the representation of the total *habitus* of the physical human being, and against the demand that the concept determination shall be something essential! It is entirely accidental whether the markers taken up into the definition are pure makeshifts like this one or approximate the nature of a principle instead. From their externality one can also see that the cognition based on concepts did not begin with them; it was rather an obscure feeling, an indeterminate but profound sense, an intimation of the essential that preceded the discovery of genera in nature and spirit, and only afterwards was a specific externality sought for the understanding. – Since in existence the concept has entered into externality, it has unfolded into its differences and cannot be absolutely attached to any single one of such properties. The properties, as the externality of the thing, are external to themselves; for this reason, as we demonstrated in the sphere of appearance in connection with the thing of many properties,[50] do the properties essentially become even self-subsistent matters; spirit, regarded from the standpoint of appearance, turns into an aggregate of many independent forces. Regarded in this way, the single property or force, even where it is posited as indifferent to the other properties, ceases to be a characterizing principle, with the result that the determinateness, as the determinateness of the concept, vanishes completely.

[49] See J. F. Blumenbach, *De Generis Humani Varietate Nativa*, 3rd edn (Göttingen, 1795), §12, p. 27, in *Concepts of Race in the Eighteenth Century*, ed. Robert Bernascone, Vol. 4 (Bristol: Thoemmes, 2001).

[50] Cf. above 11.334–339.

In the concrete things, together with the diversity of the properties among themselves, there also enters the difference between the *concept* and its *realization*. The concept has an external presentation in nature and spirit wherein its determinateness manifests itself as dependence on the external, as transitoriness and inadequacy. Therefore, although an actual thing will indeed manifest in itself what it *ought* to be, yet, in accordance with the negative judgment of the concept, it may equally also show that
12.214 its actuality only imperfectly corresponds with this concept, that it is *bad*. Now the definition is supposed to indicate the determinateness of the concept in an immediate property; yet there is no property against which an instance could not be adduced where the whole *habitus* indeed allows the recognition of the concrete thing to be defined, yet the property taken for its character shows itself to be immature and stunted. In a bad plant, a bad animal type, a contemptible human individual, a bad state, there are aspects of their concrete existence that are defective or entirely missing but that might otherwise be picked out for the definition as the distinctive mark and essential determinateness in the existence of any such concrete entity. A bad plant, a bad animal, etc., remains a plant, an animal just the same. If, therefore, the bad specimens are also to be covered by the definition, then the empirical search for essential properties is ultimately frustrated, because of the instances of malformation in which they are missing; for instance, in the case of the physical human being, the essentiality of the brain is missing in the instance of acephalous individuals; or, in the case of the state, the essentiality of the protection of life and of property is missing in the instance of despotic states and tyrannical governments. – If the concept is maintained despite the contradicting instance and the latter is declared, as measured by the concept, to be a bad specimen, then the attestation of the concept is no longer based on appearance. But that the concept stands on its own goes against the meaning of definition; for definition is supposed to be the *immediate* concept, and can therefore derive its determinations of the subject matter only from the immediacy of existence and justify itself only in what it already finds there. – Whether its content is *in and for itself* truth or contingency, this lies outside the sphere of definition; but for this reason, because the singular subject matter under consideration may well be a bad specimen, formal truth, or the agreement of the concept subjectively posited in the definition and the actual subject matter outside it, cannot be established.

The content of a definition is taken in general from immediate existence, and because it is immediate, it has no justification; the question regarding its necessity is precluded by its origination; by the very fact that the

definition voices the concept as something merely immediate, it renounces comprehending it conceptually. What it exhibits, therefore, is nothing but the form determination of the concept in a given content, without the reflection of the concept within itself, that is, *without its being-for-itself*.

But immediacy proceeds as such only from mediation, and must therefore pass over into it. Or the determinateness of the content contained in the definition is, for the very reason that it is determinateness, not only immediate but something mediated by its other. Consequently definition can apprehend its subject matter only by virtue of the opposite determination and must therefore pass over into *division*. **12.215**

2. Division

The universal must *particularize* itself; to this extent, the necessity of division lies in the universal. But because definition itself already begins with the particular, its necessity for passing over into division lies in the particular that points, as particular, to an other. Conversely, the particular separates itself off from the universal precisely by holding on to its determinateness for the sake of keeping it distinct from an other than it; the universal is therefore *presupposed* for division. The way to proceed is therefore this: the singular content of definition is raised through particularity to the extreme of universality; but universality must from now on be assumed as the objective foundation and, with it as the starting point, division presents itself as the disjunction of the universal, the latter being the first.

A transition is now introduced which, since it takes place from the universal to the particular, is determined by the form of the concept. Definition is as such something singular; a greater number of definitions pertains to a greater number of subject matters. The advance from the universal to the particular characteristic of the concept constitutes the basis and the possibility of a *synthetic science*, of a *system*, and of *systematic cognition*.

The first requirement for this is that, as indicated, the beginning be made with the subject matter in the form of a *universal*. In the realm of actuality, whether of nature or spirit, it is the concrete singularity that is given to subjective, natural cognition as first. But in a cognition which is a conceptual comprehension, at least inasmuch as it has the form of the concept for its basis, it is the *simple*, abstracted from the concrete, that on the contrary comes first, for only in this form does the subject matter have the form of a self-referring universality and of an immediacy that accords with the concept. It may perhaps be objected to this way of proceeding in matters scientific that, since intuition is easier than cognition, what can

be intuited, that is, concrete actuality, should be made the starting point of science; that this way of proceeding would be *more natural* than one that starts from an abstract subject matter and then proceeds from it to its particularization and concrete singularization. – But inasmuch as *cognition* is the issue, any comparison with *intuition* has already been decided and dismissed; the only question allowed here is what should be the first *inside cognition*, and how one should then go from there; what is required is not a method *appropriate to nature* but one *appropriate to cognition*. – If the
12.216 issue is merely one of *easiness*, then it goes without saying that it is easier for cognition to grasp the abstract simple thought determination than to grasp a concrete subject matter which is a complex web of such thought determinations and relations; and it is in this manner, no longer as it is given in intuition, that the matter should be grasped. The *universal* is in and for itself the first moment of the concept, because it is the *simple*, and the particular only comes after it, because it is the mediated; and conversely the *simple* is the more universal, and the concrete, since it is internally differentiated and hence mediated, is what already presupposes the transition from a first. – This remark applies not only to the ordering of the whole into the specific forms of definitions, divisions, and propositions, but also to the ordering of cognition as a whole and simply with respect to the difference of abstract and concrete in general. – Thus in *learning to read* for example, the more rational way to begin is also not with reading whole words or even syllables, but with the *elements* of words and syllables and with the signs of *abstract* sound inflections; in alphabetic script the analysis of concrete words into their abstract sound inflections and their signs is already accomplished, and for this reason learning to read is a primary occupation with abstractions. In *geometry*, the beginning has to be made not with a concrete space configuration but with point and line and then with plane figures, and among the latter not with polygons but with the triangle, and among curves with the circle. In *physics*, the singular natural properties or matters must be freed from the manifold entanglements in which they are found in concrete actuality, and presented with their simple, necessary conditions; they too, like space configurations, are accessible to intuition, but this intuition has to be prepared for, in such a way that they finally appear and are held free of all the modifications due to circumstances which are extraneous to their specific nature. Magnetism, electricity, various kinds of gases, etc., are such subject matters as come to be known in their specificity only by being apprehended as removed from the concrete conditions under which they appear in actuality. Of course, an experiment will exhibit them to intuition in some concrete case;

but, in order for the experiment to be scientific, it must admit only such conditions as are necessary to it, and it must be repeated in various forms in order to demonstrate that the concrete cluster of conditions that cannot be separated from the matters under consideration are inessential, for these can appear in one concrete configuration and then again in another, so that only their abstract form is left for cognition. – To mention yet one more example, it might appear natural and reasonable to regard *colors*, first, in **12.217** the concrete appearance of the animal subjective sense; next, as a spectral phenomenon hovering outside the subject, and finally fixed in objects in external actuality. But for cognition, the universal and consequently truly primary form is the middle one of the three mentioned, color as it hovers between subjectivity and objectivity in the well-known form of the spectrum, still unentangled with subjective and objective circumstances. For the pure consideration of the nature of this object such circumstances are at first only a source of interference, because they behave as efficient causes and therefore make it uncertain whether specific alterations of colors, specific transitions and relations, are based on their own specific nature as color or are rather to be attributed to the specific pathology of the circumstances themselves, to the healthy and sick particular affections and effects of the organs of the subject, or to the chemical, vegetable, and animal forces of the objects. – Numerous other examples could be adduced from the cognition of organic nature and of the world of spirit; everywhere the abstract must constitute the starting point and the element in which and from which the particularities and rich shapes of the concrete spread out.

Now, although with division or with the particular the distinction of universal and particular is duly introduced, this universal is nevertheless itself already something determinate and therefore itself only a member of a division. Hence there is a higher universal for it, and a higher yet for this other universal, and the same for the next all the way to infinity. There is no immanent limit to the cognition under consideration here, because it proceeds from a given and it is the form of abstract universality that defines its "first." Any object, therefore, that seems to possess an elementary universality is made the subject matter of a specific science: it makes an absolute beginning because *ordinary* acquaintance with it is *presupposed*, and the assumption made is that it stands on its own with no need of derivation. Definition takes it as an immediate.

Division is the immediately next step after this starting point. For this advance, only an immanent principle would be required, that is, a beginning from the universal and the concept; but the cognition under consideration here lacks any such principle, for it follows only upon the form

determination of the concept without that form's immanent reflection, and therefore takes the determinateness of the content from what is given. There is no specific reason for the particular that enters into the division, whether with respect to what constitutes the basis of the division, or with respect to the specific relation that the members of the disjunction
12.218 are supposed to have to one another. Consequently, in this respect the business of cognition can only consist partly in orderly arranging the particularities found in the empirical material, and partly also in discovering universal determinations of this material by means of comparison. Such determinations then count as grounds of division, of which there can be a variety, just as there can be an equal variety of divisions based on them. The relation of the members of a division to one another, the relation of the species, has only this one universal determination, namely that the members, the species, are determined relative to one another *in accordance with the assumed ground of division*; if their differentiation were to rest on some other consideration, their order would be arranged along different lines accordingly.

Because of the lack of a principle of self-determination, the only possible laws for this business of division consist in formal, empty rules that lead nowhere. – Thus we see laid down as a rule that division should *exhaust* the concept; but in fact each single member of the division must exhaust *the concept*. Actually, what is meant is that the *determinateness* of the concept should be exhausted; but there is nothing in an empirical manifold of species, internally void of determination, that contributes to this exhaustion whether few or many of them have been discovered; it is indifferent, for example, to the exhaustion of the concept whether in addition to the sixty-seven species of parrots another dozen are discovered. The demand for exhaustion can only mean this tautological proposition, that all the species should be listed in their *completeness*. – Now as empirical cognition expands, it can well happen that species are discovered that do not fit the assumed determination of the genus, for the genus is usually adopted more in accordance with some obscure representation of the whole *habitus* than in accordance with the more or less singular mark that should expressly serve to determine it. – In such a case, the genus would have to be altered and a justification would have to be given for regarding another group of species as the species of the one new genus; that is to say, the genus would receive its determination from what we group together on the basis of some standpoint or other that we choose to assume as a principle of unity; this standpoint thus becomes itself the ground of division. Conversely, should we hold on to the determinateness originally assumed to define the

genus, then the material that we wanted to bring as species in unity with the earlier ones, would have to be excluded. This way of carrying on without the concept – at one time by assuming a certain determinateness as the essential moment of the genus, subordinating the particulars to it or excluding them from it accordingly; at another time by starting with the particulars and letting oneself be guided in grouping them by some other determinateness – **12.219**
this way gives the appearance of a game in which it is left up to chance to decide which part or which side of the concrete to fix on in order then to bring order in accordance with it. – It is physical nature itself that presents such a contingency in the principles of division; because of the external dependency of its actuality, it stands in a manifold of connectedness which for it is likewise given; there is, therefore, an assortment of principles to which it has to adapt itself, following one principle in one series of its forms but another in another series, while also producing hybrids that go in different directions at once. Thus it happens that in one series of natural things certain marks come to the fore as especially significant and essential that in another series become inconspicuous and purposeless, the result being that it is impossible to abide by any such principle of division.

The general *determinateness* of empirical species can only consist in this: that they are simply *diverse* from one another without being opposed. The *disjunction* of the *concept* was presented earlier in a determinate form;[51] if particularity is taken without the negative unity of the concept, as a particularity which is immediate and given, then difference stays at only the reflective form of diversity considered earlier. The externality in which the concept is pre-eminently to be found in nature brings with it the total indifference of difference; for this reason it is common to take from *number* the determination for division.

Such is the contingency here of the particular with respect to the universal, and therefore of division in general, that it may be attributed to an instinct of reason when we discover in this cognition bases of division and divisions which, to the extent that sensuous properties allow it, show themselves to be more adequate to the concept. For example, in the case of animals, the instruments for eating, the teeth and the claws, are used in the systems as a far-reaching criterion of division. They may be taken at first only as features in which it is easier, for the subjective purpose of cognition, to detect distinguishing marks. But in fact the differentiation embodied in those organs is not one that pertains just to external reflection; such organs are rather the vital point of animal individuality, where the

[51] Cf. above, 12.37–38.

latter posits itself as self-referring singularity by cutting itself loose from the otherness of its external nature and from continuity with the other. – In the case of the *plant*, it is the reproductive parts that constitute the highest point of vegetable life, the point at which the plant points to the transition into sexual difference and thereby into individual singularity. For this reason the system has rightly turned to this point for a base of division
12.220 which, though not sufficient, is nonetheless far-reaching, and has thereby laid down for foundation a determinateness which is such not merely for external reflection, for the purpose of comparison, but is in and for itself the highest of which the plant is capable.

3. The theorem

1. The third stage in this advance of cognition based on concept determinations is the transition of particularity to singularity; this stage constitutes the content of the *theorem*. To be considered here, therefore, is the *self-referring determinateness*, the internal differentiation of the subject matter and the connection of the differentiated determinacies to one another. Definition contains only *one determinateness*, division contains determinateness *as against the other*; in singularization the subject matter has parted internally. Whereas definition stops at the universal concept, in theorems the subject matter is known in its reality, in the conditions and the forms of its real existence. Together with the definition, therefore, the subject matter exhibits the *idea*, which is the unity of the concept and reality. But the cognition being considered here, a cognition that is still a seeking, does not attain this presentation, for in it reality does not proceed from the concept, and therefore the dependency of reality on the concept and consequently the unity itself is not cognized.

Now according to the definition just given, the theorem is the properly *synthetic* element of a subject matter, because the relations of its determinacies are necessary, that is, are grounded in the *inner identity* of the concept. In definition and division the synthetic element is a connectedness held together externally; what is found given is brought into the form of the concept, but, as given, the entire content is only *displayed*; in the theorem, on the contrary, it ought to be *demonstratively displayed*. Since this cognition *does not deduce* the content of its definitions and of the principles of division, it seems that it might also spare itself the *proof* of the relations expressed by the theorem and be satisfied here too just with perception. But what distinguishes cognition from mere perception and representation is the *form of the concept* in general that it imparts to the content; this is done in definition and division; but since the content of the theorem proceeds

from the concept's moment of *singularity*, it consists in determinations of reality that no longer have as their relation just the simple and immediate determinations of the concept; in singularity the concept has gone over to *otherness*, to reality, thereby becoming idea. The synthesis contained in the **12.221** theorem no longer has, therefore, the form of the concept to justify it; it is a joining together of such as are *diverse*; consequently, the unity not yet thereby posited still remains to be demonstrated; here proof thus becomes necessary to this cognition itself.

Now the first difficulty that we encounter here is of distinctly *distinguishing* between which of the *determinations of the subject matter* can be admitted *into the definitions*, and which must rather be relegated to the *theorems*. In this matter, there is no principle readily available. There might seem to be one in assuming, perhaps, that what pertains to a subject matter immediately also belongs to the definition, while for the rest, since it is something mediated, the mediation must first be demonstrated. But the content of the definition is as such determined and therefore itself essentially mediated; its immediacy is only a *subjective* one, that is to say, the subject makes an arbitrary beginning letting a subject matter count as a presupposition. Now since this subject matter is as such in itself concrete, and must also be divided, the result is a number of determinations that are mediated by nature and are taken as immediate and unproved, not on the basis of any principle, but only subjectively. – Even in Euclid, who has always been justly recognized to be the master of this synthetic kind of cognition, we find under the name of *axiom* a *presupposition* about *parallel lines* that some have held to be in need of proof, and various attempts have been made to fill this lack. And there are several other theorems in which people have thought to have discovered presuppositions that should not have been immediately assumed but ought to have been proved. So far as the axiom of parallel lines is concerned, it may be noted that precisely there is where Euclid gives evidence of his good sense; he had duly appreciated the nature of his science. The proof of that axiom would have to be derived from the *concept* of parallel lines; any such proof, however, has no place in his science, no more than does the deduction of his definitions, of his axioms and his subject matter in general, of space itself and its first determinations, the dimensions. For any such deduction would have to be carried out on the basis of the concept, and this lies outside the proper domain of Euclidean science; these must remain for it, therefore, necessary *presuppositions*, relative *firsts*.

Axioms, to take this opportunity of mentioning them, belong to the same class. They are commonly but wrongly taken to be absolute firsts, as

if they were not in need of proof in and for themselves. If such were in fact the case, they would then be mere tautologies, for it is only in abstract
12.222 identity that there is no diversity and that therefore also no mediation is needed. But if the axioms are more than just tautologies, then they are *propositions* drawn from *another science*, since within the science for which they serve as axioms they are meant as presuppositions. Strictly speaking, therefore, they are *theorems*, and are indeed mostly drawn from logic. The axioms of geometry are lemmas of this kind, logical propositions, and they come close, moreover, to being tautologies because they are concerned with quantity alone and every qualitative difference has therefore been purged from it. Of the principal axiom, the purely quantitative syllogism, we spoke earlier.[52] – Axioms, therefore, when considered in and for themselves, are just as much in need of proof as are definitions and divisions, and they are not made into theorems only for the reason that, since they are relative firsts, they are assumed for a certain standpoint as presuppositions.

As regards *the content of theorems*, there is one further precision to be made. Because this content consists in a *connection of determinacies* of the concept's reality, such connections may be more or less incomplete and single relations of the subject matter, or, on the contrary, they may be one such relation that encompasses the *whole content* of reality and expresses the content's determinate connection. But the *unity of all the content determinacies* is equivalent to the *concept*; a proposition that contains them is therefore itself a definition again – not one, however, that expresses the concept only as immediately assumed, but one that expresses it rather as developed into its determinate, real differences, or one that expresses the concept's complete existence. The two together, therefore, present the *idea*.

If we closely compare the theorems of a synthetic science, *of geometry in particular*, we find this distinction, namely that some of the science's theorems contain only singular relations of the subject matter, whereas others contain relations in which its full determinateness is expressed. It is a very superficial view that attributes equal value to all propositions, on the ground that each generally contains a truth, and in the formal progression from step to step of a proof each is equally essential.[53] The difference with respect to the content of theorems is most intimately connected with this progression itself, and some further remarks concerning the latter will serve to clarify that difference further, as well as the nature of synthetic

[52] Cf. above, 12.104–105.

[53] For the background of Hegel's polemical remark, see the note in the critical edition. GW 12, 353, note to 222.33–36.

cognition. To start with, Euclidean geometry (which, as the representative of the synthetic method of which it delivers the most accomplished exemplar, shall serve as an example) has from ancient times been renowned for the order in the progression of its theorems, whereby for each theorem the propositions required for its construction and proof are always found already proved. This circumstance concerns the formal sequence of inference; yet, important as it is, it still has primarily to do with the external ordering of purposiveness, and bears on its own no connection **12.223**
to the essential difference of the concept and the idea in which there lies a higher principle of the necessity of the progression. – That is to say, the definitions with which the beginning is made apprehend the sensuous subject matter as immediately given, and they determine it according to its proximate genus and specific difference;[54] these are equally the simple and *immediate* determinacies of the concept, the universality and particularity whose relation is developed no further. Now the initial theorems themselves have nothing at their disposal except such immediate determinations as are found in the definitions; similarly their reciprocal *dependence* can only be a matter at first of each being in general *determined* through the other. Thus Euclid's first propositions regarding the triangle have to do only with *congruence*, that is, *how many parts must be determined* in a triangle in order that the *remaining* parts of the one and same triangle, or the whole of it, be *determined in full*.[55] That *two* triangles are compared with one another and their congruence posited in the fact that they *coincide* is a detour needed by a method that must rely on *sensuous coincidence* instead of the *thought of determinateness*. Otherwise considered for themselves, these theorems themselves contain *two* parts, one of which can be regarded as the *concept*, and the other as the *reality* that completes the concept by realizing it. *For the understanding*, whatever suffices for a full determination, that is to say, the two sides and the enclosed angle in this case, is already the entire triangle; nothing further is needed for its complete determinateness; the remaining two angles and the third side are the superfluity of reality over and above the determinateness of the concept. Thus all that those theorems in fact do is to reduce the sensuous triangle, which of course requires three sides and three angles, to its simplest conditions. The definition had mentioned, quite in general, only the three lines that enclose the plane figure and make it a triangle; it is a theorem that first expresses the *determinateness* of the angles through the determinateness of the sides, just as the remaining theorems express the dependence of three other parts on three others. –

[54] *Differenz*. [55] See Euclid, *Elements*, Book 1, Props. 4, 5, 6, 8.

But the complete determinateness of the magnitude of a triangle in terms of its sides is contained in the *Pythagorean theorem*; it is in this theorem that we first have the *equation* of the sides of the triangle, for the preceding sides[56] bring the triangle to a reciprocal *determinateness* of part to part only in general, not to an *equation*. This proposition is therefore the perfect, *real definition* of the triangle – of the right-angled triangle in the first place, the simplest in its differences and hence the most regular. – Euclid brings the first book to a close with this proposition, for it does in fact attain a perfect determinateness. And after he has reduced to a uniform type those
12.224 triangles which are not right-angles and are affected by greater inequality, he concludes the second book with the reduction of the rectangle to the square, with an equation between the self-equal, or the square, and the internally unequal, or the rectangle; similarly, in the Pythagorean theorem, the hypotenuse that corresponds to the right-angle, the self-equal, constitutes one side of the equation, while the other side is made up by the self-unequal, the *two* perpendicular sides. The equation between the square and the rectangle is at the basis of the *second* definition of the circle, and this is again the Pythagorean theorem, except that the two perpendicular sides of the right-angle are assumed to be alterable; the first equation of the circle is in precisely the relationship of *sensuous* determinateness to *equation* as holds between the two different definitions of conic sections in general.

This truly synthetic progression is a transition from *universal* to *singularity*, namely *to that which is determined in and for itself*, or to the unity of the subject matter *in itself* inasmuch as this has come apart, differentiated into its essential real determinacies. In other science, however, the common and quite imperfect way of advancing from universality to singularity is indeed to start from a universal, but then to *singularize* and *concretize* it by *applying* it to a material brought in from elsewhere; in this way, the *singularity* of the idea is strictly speaking an *empirical* addition.

Now whatever the content of the theorem, whether imperfect or perfect, it must be *proved*. It is a relation of real determinations that do not have the relation of concept determinations; when they do have this relation, as it can be shown to be the case for the propositions we have called *second* or real *definitions*, such definitions are for that very reason in one respect definitions; but since their content consists at the same time of relations of real determinations, not just of the relation of universal and simple determinateness, in comparison with such a first definition they

[56] All the editions, including the critical, read *Seiten*, i.e "sides." I am inclined to agree with Moni and Cesa that one should read *Sätze* instead, i.e. "propositions." "Sides" does not seem to make much sense. Hegel refers to the Pythagorean equation as "proposition" immediately after.

are also in need and capable of proof. As real determinacies, they have the form of *indifferent subsistence and indifferent diversity*; hence they are not immediately one and therefore their mediation is to be demonstrated. The immediate unity in the first definition is the one in accordance with which the particular is in the universal.

2. Now the *mediation* which we must now consider more closely may be simple or may go through several mediations. The mediating members are joined together with those to be mediated; but since it is not on the basis of the concept, to which the transition into an opposite is altogether alien, that the mediation and the theorem are retraced in this cognition, in the absence of any concept of connectedness, the mediating determinations must be imported from somewhere as a provisory material for the scaffolding of the **12.225** proof. This preparation is the *construction*.

Now among the connections of the content of the theorem, of which there can be a great number, only those must be adduced and made to work that are of service to the proof. The supply of material only acquires meaning in this context; in itself it appears blind and meaningless. In retrospect it will of course become apparent in the proof that there was a purpose to drawing, for example, such or such additional lines to a geometrical figure as the construction specifies; in the course of the construction itself, however, this must be done blindly; by itself, therefore, this operation is without understanding, since the purpose motivating it is yet to be declared. – It is a matter of indifference whether the operation is undertaken for the purpose of a theorem in the strict sense or a problem; as it first appears before the proof, the operation is not anything derived from the given specification of the theorem or the problem – a meaningless act, therefore, for anyone as yet not acquainted with its purpose, and then always only directed by an external purpose.

This hidden purpose becomes apparent in the *proof*. This contains, as stated,[57] the mediation of what the theorem declares as bound together, and it is only by virtue of this mediation that this connectedness first *appears* as *necessary*. Just as the construction lacks on its own the subjectivity of the concept, so is the proof a subjective act lacking in objectivity. For since the content determinations of the theorem are not posited at the same time as determinations of the concept, but are posited instead as *indifferent parts* standing in a multitude of external relations to one another, it is only in the *formal*, *external* concept that the necessity manifests itself. The proof is not a *genesis* of the relation that constitutes the content of the theorem;

[57] i.e. in the preceding page.

the necessity is present only to insight, and the whole proof is only for *the subjective interest of cognition*. It is for this reason a thoroughly *external* reflection that proceeds from the *outside to the inside*, that is, arrives in conclusion at the inner constitution of the relation on the basis of external circumstances. These circumstances, which the construction has presented, are a *consequence* of the nature of the subject matter; here they are converted instead into the *ground* and the *mediating* relations. The middle term, the third term in which the terms linked in the theorem present themselves in their unity and that provides the nerve of the proof, is therefore only something in which the connectedness *appears* and is *external*. Because the *sequence* which the proof goes through is rather the reverse of the nature of the fact, what is considered in the proof as *ground* is a subjective ground, one that brings out the nature of the fact only for cognition.

The foregoing considerations make clear the necessary limit of this cog-
12.226 nition, a limit that usually goes unrecognized. The science of *geometry* is the most illustrious example of the synthetic method – but it has been inappropriately applied to other sciences as well, even to philosophy. Geometry is a science of *magnitude*; hence *formal* inference is the one most appropriate to it; since it treats the quantitative determination alone, abstracting from anything qualitative, it can confine itself to *formal identity*, to the unity void of concept which is *equality* and belongs to external, abstractive reflection. The determinations of space that are its subject matter are already abstract objects, suitably prepared for the purpose of obtaining a perfectly finite, external determinateness. This science, because of its abstract subject matter, on the one hand has an aura of sublimity about it, for in these empty silent spaces color is extinguished and the other sensuous properties have equally vanished, and further, every other interest that would appeal to a living individuality is silenced. On the other hand, this abstract subject matter is still *space*, *a non-sensuous sensuous*. To be sure, *intuition* is raised to a higher level in this abstraction; space is now a form of intuition, but it is still intuition – sensuous intuition, the *externality*[58] of the senses themselves,[59] their pure *absence of concept*. – Enough has been heard lately of the pre-eminence of geometry in this respect. There are those who say that geometry's foremost advantage is that it is based on the intuition of the senses, even believe that its scientific pre-eminence depends on this circumstance and that its proofs rest on intuition. This shallow view must be countered with the plain reminder that no science can be brought about by intuition, but only *by thought*. The intuitive character that geometry

[58] *Aussereinander* [59] A24–25/B39–40; A33/B50.

possesses because of its still sensuous material only gives to it that level of evidence that the *senses* generally provide to thoughtless spirit. It is therefore regrettable that the same sensuousness of material which is a sign of the inferiority of its standpoint has been reckoned instead to its advantage. It is solely to the *abstraction* of its sensuous subject matter that geometry owes its aptitude for a higher scientific reach and the advantage that it has over the collections of information that people are also want to call sciences but have for content only the concrete perceptible material of the senses, and only because of the order that they seek to bring to it do they give any sign of a remote inkling and hint of the requirements of the concept.

It is only because the space of geometry is the abstract emptiness of externality that it is possible for figures to be drawn in its indeterminateness in such a way that their determinations remain perfectly at rest outside one another with no immanent transition to the opposite. The science of these figures is therefore plainly and simply the science *of the finite* which is **12.227** compared according to magnitude and has for its unity the external one of *equality*. But now, since with these figures the start is made from a variety of sides and points at once, and the various figures fall into place of themselves, in comparing them their *qualitative* unlikeness and *incommensurability* also come into view. Geometry is thus driven, beyond the *finitude* within which it advanced step by step orderly and securely, to infinity – to the positing as equal of such as are qualitatively diverse. Here it loses the evidence that it derived from being otherwise based on fixed finitude without having to deal with the concept and the transition to the opposite which is its manifestation. As a finite science, geometry reaches its limit at this point, for the necessity and the mediation of the synthetic realm is no longer grounded in merely *positive identity*, but in *negative identity*.

If geometry, like algebra, quickly runs up against its limit with its abstract subject matter, suited as this is only to the understanding, it is evident from the start that the synthetic method is all the more insufficient for *other sciences*, and most insufficient of all for philosophy. Regarding definition and division, we have already made the relevant points, and we should be left here to speak only of theorems and proofs. But, besides the presupposition of definition and division that itself requires proof and presupposes it, also problematic is the very *position* of definition and division with respect to the theorems. This position is especially noteworthy in the empirical sciences, as for example physics, whenever they want to give themselves the form of synthetic sciences. This is how they go about it. The *reflective determinations* of particular *forces*, or of otherwise inner and essential forms, which are the results of an analysis of experience and can be

justified only as such *results*, must be *placed at the top*, in order to obtain from them a general *foundation* that can then be *applied to the singular* and be instantiated there. Since these general foundations have no hold of their own, we must *simply grant them* in the meantime; it is only in the derived *consequences* that we notice that the latter are in fact the ground of those *presuppositions*. The so-called *explanation*, and the proof of the concrete brought into theorems, turn out to be partly a tautology, partly an obfuscation of the true relation, and partly also an obfuscation that serves to hide the deception of cognition. For cognition has collected experiences tendentiously, only so that it could attain its simple definitions and principles; and it has pre-empted the possibility of empirical refutation by taking experiences and accepting them as valid, not in their concrete totality but selectively, as examples that can then be used on behalf of its hypotheses and theories. In this subordination of concrete experience to
12.228 presupposed determinations, the foundation of the theory is obscured and is only indicated according to the side that suits the theory; and, quite in general, the unprejudiced examination of concrete perceptions for their own sake is thereby much impeded. Only by turning the whole procedure upside down does the whole thing acquire the right relation in which the link of ground and consequence can come into view. One of the principal obstacles in the study of these sciences is thus *the way we enter into them*, which we can only do by *blindly taking* the presuppositions *for granted* and, without being able to form any further concept of them, often not even an exact representation, at best by conjuring up in phantasy a confused picture of them, we right there impress in our memory the determinations of the forces and matters that we have assumed, their hypothetical shapes, their directions and rotations. If we are asked to produce the necessity and the concept of these assumptions in order to justify assuming their validity, we discover that we are incapable of making a step beyond the starting point.

We had occasion above to speak of the inappropriateness of applying the synthetic method to strictly analytic science.[60] Wolff extended this application to every kind of bits of knowledge that he dragged into philosophy and mathematics – cognitions which were partly of a wholly analytical nature, and partly also devoted to practical matters of an incidental kind. The incongruity between this material, easy to grasp and by nature incapable of rigorous and scientific treatment, and the pompous scientific roundabouts icing it, has alone demonstrated the clumsiness of such an application,

[60] Cf. above, 12.206–207.

finally discrediting it.[s] Yet, this misuse has not sufficed to shake the belief **12.229**
that this method is both suited and essential to attaining scientific rigor in *philosophy*. Spinoza's example, the way he presented his philosophy, has long served as model in this regard. But the fact is that Kant and Jacobi did do away with this whole style of the previous metaphysics and its method along with it. As for the content of that metaphysics, Kant has in his own fashion shown that it leads by strict demonstration to *antinomies*, the same whose nature we have in other respects elucidated at the appropriate places.[63] But Kant did not reflect on the nature of the demonstration associated with them, on the fact that such a demonstration is inextricably bound to a finite content. In his *Principles of Natural Science*, he gave himself an example of how to deal with a science of reflection on its own methodological terms, in a way that he thought would vindicate it for philosophy.[64] – While Kant attacked previous metaphysics for the most part from the side of its content, Jacobi did it especially from the side of its method of demonstration and, with great clarity and profundity, he put his finger on precisely the point at issue, namely that such a method of demonstration is strictly bound to the cycle of rigid necessity of finite reality, and that *freedom*, that is, *the concept* and with it *everything that truly exists*, lies beyond it and is unattainable by it.[65] – According to Kant's result,

[s] For example, Wolff's *First Principles of Architecture*, the Eighth Theorem, runs as follows: Theorem: A window must be wide enough that two persons can comfortably stand at it side by side.

Proof: For it is common for one to stand at a window with somebody else to view the outside. Now since the fabric architect should in every respect satisfy the main intentions of the owner of the fabric (§1), he must also construct the window in such a manner that two persons can comfortably stand at it side by side. *Q.E.D.*[61]

From the same author's *Principles of Fortification*, the Second Theorem:

Theorem: If the enemy encamps in the vicinity, and the attempt at a rush to relieve the siege is expected, a line of circumvallation must be drawn around the whole siege. Proof: Lines of circumvallation prevent anyone from penetrating into an area from outside (§311). But those who wish to relieve the area of siege will attempt to penetrate the area from outside. If, therefore, one wants to keep them out, a line of circumvallation must be drawn around the area. Therefore, if the enemy encamps in the vicinity and the attempt at a rush to relieve the siege is expected, the area must be enclosed in lines of circumvallation. *Q.E.D.*[62]

[61] See Christian Wolff, *Anfangs-Gründe aller mathematischen Wissenschaften I*, *Anfangs-Gründe der Bau-Kunst*, in *Gesammelte Werke*, *erste Abteilung*, Vol. 12 (Hildesheim: Georg Olms, 1973), p. 440.

[62] See Christian Wolff, *Anfangs-Gründe aller mathematischen Wissenschaften II, Anfangs-Gründe der Fortification, in Gesammelte Werke, erste Abteilung*, Vol. 13 (Hildesheim: Georg Olms, 1973), p. 724.

[63] GW 11, 114–120, 147; cf. above, 21.179ff., 228ff.

[64] Kant, *Metaphysische Anfangsgründe der Naturwissenschaft* (1786), English trans., *Metaphysical Foundations of Natural Sciences*, trans. Michael Friedman, in *Immanuel Kant: Theoretical Philosophy after 1781*, ed. Henry Allison and Peter Heath (Cambridge: Cambridge University Press, 2002). Cf. "Preface," AK 4.467–479.

[65] See, for instance, Supplement VII to the 1789 edition of *Concerning the Doctrine of Spinoza*, *Werke*: Gesamtausgabe, Series 1, Vol. 1, pp. 247–265. English trans., *The Main Philosophical Works*, pp. 370–373.

it is the peculiar content of metaphysics that leads it into contradictions; the inadequacy of cognition is due to its *subjectivity*. Jacobi's result is that the inadequacy is due instead to the method and the whole nature of cognition itself that only grasps a *concatenation of conditions and dependency* and therefore proves itself inadequate to what exists in and for itself, to what is absolutely true. And in fact, since the principle of philosophy is the *infinite free concept* and all its content rests on that alone, the method suited to a finitude empty of concept is inadequate to it. The synthesis and the mediation of this method, *the process of proving*, goes no further than a
12.230 *necessity* which is opposed to *freedom*, that is, an *identity* of the dependent which is only *implicit*, whether it is apprehended as *internal* or as *external*, and in which that which in it constitutes reality, the differentiation that has emerged in concrete existence, remains simply *self-subsistent diversity* and therefore *something finite*.[66] In this reality, therefore, this *identity* does not itself attain *concrete existence* but remains *only internal*, or again, is only *external*, because its determinate content is given to it. Either way, whether internal or external, the identity is something abstract that does not possess within it the side of reality, is not posited as *determinate identity* in and for itself; therefore the *concept*, which alone is the issue here and which is the infinite in and for itself, is precluded from this cognition.

In synthetic cognition, therefore, the idea achieves its purpose only to the extent that the *concept* becomes *for the concept* according to its *moments* of *identity* and *real determinations*, or of *universal* and *particular* differences – further also *as an identity* which is *connectedness* and *dependence* in diversity. But this, its subject matter, is not adequate to the concept; for *in it*, *in this subject matter or in its reality*, the concept does not come to be the *unity of itself with itself*; in necessity its identity is for it, but in this identity the necessity is not itself the *determinateness* but is on the contrary a material external to it, that is to say, is not determined by the concept and the concept, therefore, does not recognize itself in it. Thus in general the concept is not for itself, is not at the same time determined in and for itself according to its unity. For this reason the idea does not as yet attain the truth in this cognition: it does not because of the disproportion between subject matter and subjective concept. – But the sphere of necessity is the highest point of being and reflection; of itself, in and for itself, it passes over into the freedom of the concept, inner identity passes over into its manifestation which is the concept as concept. How this *transition* from the sphere of necessity to the concept occurs *in itself* has been shown

[66] Cf. "absolute necessity," above 11.389ff.

when considering necessity,[67] and we saw it also at the beginning of this Book as the *genesis of the concept*.[68] In the present context, *necessity* has the position of being the *reality or the subject matter* of the concept, just as the concept into which it passes is now the concept's subject matter. But the transition itself is the same. Here, too, it is at first only *in itself*, still lying in our reflection outside cognition, that is, itself still the inner necessity of cognition. Only the result is for cognition. The idea, in so far as the concept is now *for itself* determined in and for itself, is the *practical idea*, *action*. **12.231**

B. THE IDEA OF THE GOOD

Inasmuch as the concept, which is its own subject matter, is determined in and for itself, the subject is determined as *singular*. As subjective it again has an implicit otherness for its presupposition; it is the *impulse* to realize itself, the purpose that *on its own* wants to give itself objectivity in the objective world and realize itself. In the theoretical idea the subjective concept, as a *universal* that in and for itself *lacks determination*, stands opposed to the *objective* world from which it derives determinate content and filling. But in the practical idea it is as actual that it stands over against the actual; but the certainty of itself that the subject possesses in being determined in and for itself is a certainty of its actuality and of the *non-actuality* of the world; it is the singularity of this world, and the determinateness of its singularity, not just its otherness as abstract universality, which is a nullity for the subject. The subject has here vindicated *objectivity* for itself; its inner determinateness is the objective, for it is the universality which is just as much absolutely determined; the previously objective world is on the contrary only something still posited, an *immediate* which is determined in a multitude of ways but which, because it is only immediately determined, in itself eludes the unity of the concept and is of itself a nullity.

This determinateness which is in the concept, is equal to the concept, and entails a demand for singular external actuality, is the *good*. It comes on the scene with the dignity of being absolute, because it is intrinsically the totality of the concept, the *objective* which is at the same time in the form of free unity and subjectivity. This idea is superior to the idea of cognition just considered, for it has not only the value of the universal but also of the absolutely actual. – It is *impulse*, in so far as this actual is still subjective, self-positing, without at the same time the form of immediate

[67] Cf. above, 11.408–409. [68] Cf. above, 12.11.

presupposition; its impulse to realize itself is not, strictly speaking, to give itself objectivity, for this it possesses within itself, but to give itself only this empty form of immediacy. – The activity of purpose, therefore, is not directed at itself, is not a matter of letting in a given determination and making it its own, but of positing rather its own determination and, by means of sublating the determinations of the external world, giving itself reality in the form of external actuality. – The idea of the will as a self-determining *explicitly* possesses *content* within itself. Now this content is indeed a *determinate* content, and to this extent finite and *restricted*; self-determination is essentially *particularization*, since the reflection of
12.232 the will is in itself, as negative unity as such, also singularity in the sense that it excludes an other while presupposing it. Yet the particularity of the content is at first infinite by virtue of the form of the concept, of which it is the proper determinateness, and which in that content possesses its negative self-identity, and consequently not only a particularity but its infinite singularity. The mentioned *finitude* of the content in the practical idea only means, therefore, that the idea is at first not yet realized; the concept is *for the content* that which exists in and for itself; it is here the idea in the form of objectivity existing *for itself*; on the one hand, the subjective is for this reason no longer just something *posited*, arbitrary or accidental, but is an absolute; but, on the other hand, this *form of concrete existence*, this *being-for-itself*, does not as yet have the form of the being-*in-itself*. Thus what from the side of the form as such appears as opposition, appears in the form of the concept reflected *into simple identity*, that is, appears in the content as its simple determinateness; the good, although valid in and for itself, is thereby a certain particular purpose, but not one that first receives its truth by being realized; on the contrary, it is for itself already the true.

The syllogism of immediate *realization* does not itself require closer exposition here; it is none other than the previously considered syllogism of *external purposiveness*;[69] only the content constitutes the difference. In external as in formal purposiveness it was an indeterminate finite content in general; here, though also finite, it is as such at the same time absolutely valid. But in regard to the conclusion, the realized purpose, a further difference enters in. In being realized the finite purpose still attains only the status of a means; since it is not a purpose determined in and for itself already from the beginning, as realized it also remains something that does not exist in and for itself. If the good is again also fixed as *something finite*,

[69] Cf. above, 12.160–162.

and is essentially such, then, notwithstanding its inner infinity, it too cannot escape the fate of finitude – a fate that manifests itself in several forms. The realized good is good by virtue of what it already is in the subjective purpose, in its idea; the realization gives it an external existence, but since this existence has only the status of an externality which is in and for itself null, what is good in it has attained only an accidental, fragile existence, not a realization corresponding to the idea. – Further, since this good is restricted in content, there are several kinds of it; in concrete existence a good is subject to destruction not only due to external contingency and to evil, but also because of collision and conflict in the good itself. From the side of the objective world presupposed for it (in the presupposition of which consists the subjectivity and the finitude of the good, and which as a distinct world runs its own course), the realization itself of the good **12.233** is exposed to obstacles, indeed, might even be made impossible. The good thus remains an *ought*; it exists *in and for itself*, but *being*, as the ultimate abstract immediacy, remains over against it *also* determined as a *non-being*. The idea of the fulfilled good is indeed an *absolute postulate*, but no more than a postulate, that is, the absolute encumbered with the determinateness of subjectivity. There still are two worlds in opposition, one a realm of subjectivity in the pure spaces of transparent thought, the other a realm of objectivity in the element of an externally manifold actuality, an impervious realm of darkness. The complete development of this unresolved contradiction, between that *absolute purpose* and the *restriction* of this reality that stands opposed to it, has been examined in detail in the *Phenomenology of Spirit* (pp. 323ff.).[70] – Inasmuch as the idea has within it the moment of complete determinateness, the other concept to which the concept in it relates possesses in its subjectivity at the same time the moment of an object; consequently the idea enters here into the shape of *self-consciousness*, and in this one respect coincides with its exposition.

But what the practical idea still lacks is the moment of real consciousness itself, namely that the moment of actuality in the concept would have attained for itself the determination of *external being*. – This lack can also be regarded in this way, namely that the *practical* idea still lacks the moment of the *theoretical* idea. That is to say, in the latter there stands on the side of the subjective concept – the concept that is in process of being intuited in itself by the concept – only the determination of *universality*; cognition only knows itself as apprehension, as the identity of the concept with itself which, for itself, is *indeterminate*; the filling, that is, the objectivity

[70] The reference is to the 1807 edition. Cf. GW 9, 210ff.

determined in and for itself, is for this identity a *given*; what *truly exists* is for it the actuality present there independently of any subjective positing. For the practical idea, on the contrary, this actuality constantly confronting it as an insuperable restriction is in and for itself a nullity that ought to receive its true determination and intrinsic value only through the purposes of the good. It is the will, therefore, that alone stands in the way of attaining its goal, because it separates itself from cognition and because for it external actuality does not receive the form of a true existence. The idea of the good can therefore find its completion only in the idea of the true.

But it makes this transition through itself. In the syllogism of action, one premise is the *immediate reference* of the *good purpose to the actuality* which
12.234 it appropriates and which, in the second premise, it directs as external *means* against the external actuality. The good is for the subjective concept the objective; actuality confronts it in existence as an insuperable restriction only in so far as it still has the determination of *immediate existence*, not of something objective in the sense that it is being in and for itself; it is rather either the evil or the indifferent, the merely determinable, whose worth does not lie within it. But this abstract being that confronts the good in the second premise has already been sublated by the practical idea itself; the first premise of this idea's action is the *immediate objectivity* of the concept, according to which purpose is communicated to actuality without any resistance and is in the simple connection of identity with it. To this extent, therefore, what remains is to bring together the thoughts of the two premises of the practical idea. All that is added to what is already accomplished in the first premise by the objective concept is that in the second it is posited by way of mediation, hence *for it*. Just as in purposive connection in general, where the realized purpose is again only a means but the means is conversely also the realized purpose, so too now in the syllogism of the good the second premise is already immediately present in the first *in itself*, except that this immediacy is not sufficient and the second premise is for the first already postulated – the realization of the good in the face of another actuality confronting it is the mediation which is essentially necessary for the immediate connection and consummation of the good. For the first premise is only the first negation or the otherness of the concept, an objectivity that would be a state of immersion of the concept into externality; the second premise is the sublation of this otherness, whereby the immediate realization of the purpose first becomes the actuality of the good as concept existing for itself, for in that actuality the concept is posited as identical with itself, not with an other, and in this way alone as free concept. If it is now claimed that the purpose of the good is thereby

still not realized, what we have is a relapse of the concept to the standpoint that it assumes prior to its activity, when the actual is determined as worthless and yet presupposed as real. This is a relapse that gives rise to the progression to bad infinity. Its sole ground is that in the sublating of that abstract reality the sublating itself is just as immediately forgotten, or what is forgotten is that this reality is rather already presupposed as an actuality which is in and for itself worthless, nothing objective. This repetition of the presupposition of the unrealized purpose after the actual realization of the purpose also means that *the subjective attitude* of the objective concept **12.235** is reproduced and perpetuated, with the result that the *finitude* of the good, with respect to both content and form, appears as the abiding truth, and its actualization always as only a *singular*, never *universal*, act. – As a matter of fact this state has already sublated itself in the realization of the good; what still *limits* the objective concept is its own *view* of itself, and this view vanishes in the reflection on what its realization is *in itself*. By this view the concept only stands in its own way, and all that it has to do about it is to turn, not against an external actuality, but against itself.

That is to say, the activity in the second premise produces only a one-sided *being-for-itself*, and its product therefore appears as something *subjective* and *singular*, and the first presupposition is consequently repeated in it. But this activity is in truth just as much the positing of the *implicit* identity of the objective concept and the immediate actuality. This actuality is by presupposition determined to have only the reality of an appearance, to be in and for itself a nullity, entirely open to determination by the objective concept. As the external actuality is altered by the activity of the objective concept and its determination is consequently sublated, the merely apparent reality, the external determinability and worthlessness, are by that very fact removed from it and it is thereby *posited* as having existence in and for itself. In this the presupposition itself is sublated, namely the determination of the good as a merely subjective purpose restricted in content, the necessity of first realizing it by subjective activity, and this activity itself. In the result the mediation itself sublates itself; the result is an *immediacy* which is not the restoration of the presupposition, but is rather the presupposition as sublated. The idea of the concept that is determined in and for itself is thereby posited, no longer just in the active subject but equally as an immediate actuality; and conversely, this actuality is posited as it is in cognition, as an objectivity that truly exists. The singularity of the subject with which the subject was burdened by its presupposition has vanished together with the presupposition. Thus the subject now exists as *free*, *universal self-identity* for which the objectivity of the concept is a

given, just as immediately *present* to the subject as the subject immediately knows itself to be the concept determined in and for itself. Accordingly, in this result *cognition* is restored and united with the practical idea; the previously discovered reality is at the same time determined as the realized absolute purpose, no longer an object of investigation, a merely objective world without the subjectivity of the concept, but as an objective world whose inner ground and actual subsistence is rather the concept. This is the absolute idea.

CHAPTER 3

The absolute idea

12.236

The absolute idea has shown itself to be the identity of the theoretical and the practical idea, each of which, of itself still one-sided, possesses the idea only as a sought-for beyond and unattained goal; each is therefore a *synthesis of striving*, each possessing as well as *not* possessing the idea within it, passing over from one thought to the other without bringing the two together but remaining fixed in the contradiction of the two. The absolute idea, as the rational concept that in its reality only rejoins itself, is by virtue of this immediacy of its objective identity, on the one hand, a turning back to *life*; on the other hand, it has equally sublated this form of its immediacy and harbors the most extreme opposition within. The concept is not only *soul*, but free subjective concept that exists for itself and therefore has *personality* – the practical objective concept that is determined in and for itself and is as person impenetrable, atomic subjectivity – but which is not, just the same, exclusive singularity; it is rather explicitly *universality* and *cognition*, and in its other has *its own* objectivity for its subject matter. All the rest is error, confusion, opinion, striving, arbitrariness, and transitoriness; the absolute idea alone is *being*, imperishable *life*, *self-knowing truth*, and is *all truth*.

It is the sole subject matter and content of philosophy. Since it contains *all* determinateness within it, and its essence consists in returning through its self-determination and particularization back to itself, it has various shapes, and the business of philosophy is to recognize it in these. Nature and spirit are in general different modes of exhibiting *its existence*, art and religion its different modes of apprehending itself and giving itself appropriate existence. Philosophy has the same content and the same purpose as art and religion, but it is the highest mode of apprehending the absolute idea, because its mode, that of the concept, is the highest. Hence it seizes those shapes of real and ideal finitude, as well of infinity and holiness, and comprehends them and itself. The derivation and cognition of these particular modes are now the further business of the particular

12.237 philosophical sciences. Also the *logicality* of the absolute idea can be called a *mode* of it; but *mode* signifies a *particular* kind, a *determinateness* of form, whereas the logicality of the idea is the universal mode in which all particular modes are sublated and enveloped. The logical idea is the idea itself in its pure essence, the idea which is enclosed in simple identity within its concept and in *reflective shining* has as yet to step into a form-determinateness. The Logic thus exhibits the self-movement of the absolute idea only as the original *word*, a word which is an *utterance*, but one that in being externally uttered has immediately vanished again. The idea is, therefore, only in this self-determination of *apprehending itself*; it is in *pure thought*, where difference is not yet *otherness*, but is and remains perfectly transparent to itself. – The logical idea thus has itself, as the *infinite form*, for its content – form that constitutes the opposite of *content* inasmuch as the latter is the form determination that has withdrawn into itself and has been so sublated in identity that this concrete identity stands over against the identity developed as form; the content has the shape of an other and of something given as against the form that as such stands simply in *reference*, and whose determinateness is posited at the same time as reflective shine. – More exactly, the absolute idea itself has only this for its content, namely that the form determination is its own completed totality, the pure content. Now the *determinateness* of the idea and the entire course traversed by this determinateness has constituted the subject matter of the science of logic, and out of this course the absolute idea has come forth *for itself*; thus to be for itself, however, has shown itself to amount to this, namely that determinateness does not have the shape of a *content*, but that it is simply as *form*, and that accordingly the idea is the absolutely *universal idea*. What is left to be considered here, therefore, is thus not a content as such, but the universal character of its form – that is, *method*.

Method may appear at first to be just the *manner* in which cognition proceeds, and this is in fact its nature. But as method this manner of proceeding is not only a *modality* of *being determined in and for itself*; it is a modality of cognition, and as such is posited as determined by the *concept* and as form, since form is the soul of all objectivity and all otherwise determined content has its truth in form alone. If the content is again assumed as given to the method and of a nature of its own, then method, so understood, is just like the logical realm in general a merely *external* form. But against this assumption appeal can be made, not only to the fundamental concept of what constitutes logic, but to the entire logical course in which all the shapes of a given content and of objects came up for consideration. This course has shown the transitoriness and the untruth of

all such shapes; also that no given object is capable of being the foundation to which the absolute form would relate as only an external and accidental determination; that, on the contrary, it is the absolute form that has proved **12.238** itself to be the absolute foundation and the ultimate truth. For this course the method has resulted as the *absolutely self-knowing concept*, as the *concept that has* the absolute, both as subjective and objective, *as its subject matter*, and consequently as the pure correspondence of the concept and its reality, a concrete existence that is the concept itself.

Accordingly, what is to be considered as method here is only the movement of the *concept* itself. We already know the nature of this movement, but it now has, *first*, the added significance that the *concept is all*, and that its movement is the *universal absolute activity*, the self-determining and self-realizing movement. The method is therefore to be acknowledged as the universal, internal and external mode, free of restrictions, and as the absolutely infinite force to which no object that may present itself as something external, removed from reason and independent of it, could offer resistance, or be of a particular nature opposite to it, and could not be penetrated by it. It is therefore *soul and substance*, and nothing is conceived and known in its truth unless *completely subjugated to the method*; it is the method proper to each and every fact because its activity is the concept. This is also the truer meaning of its *universality*; according to the universality of reflection, it is taken only as the method for all things; but according to the universality of the idea, it is both the manner of cognition, of the concept *subjectively* aware of itself, and the *objective* manner, or rather the *substantiality of things* – that is, of concepts as they first appear as *others* to *representation* and *reflection*. It is therefore not only the highest *force* of reason, or rather its *sole* and absolute *force*, but also reason's highest and sole *impulse* to find and recognize *itself through itself in all things*. – *Second*, here we also have the *distinction* of the *method from the concept as such*, the *particularization* of the method. As the concept was considered for itself, it appeared in its immediacy; the *reflection*, or *the concept considering it*, fell on the side of *our* knowledge. The method is this knowledge itself, for which the concept is not only as subject matter but is as its own subjective act, the *instrument* and the means of cognitive activity, distinct from this activity and yet the activity's own essentiality. In cognition as enquiry, the method likewise occupies the position of an *instrument*, as a means that stands on the side of the subject, connecting it with the object. The subject in this syllogism is one extreme, the object is the other, and in conclusion the subject unites through its method with the object without however *uniting with itself* there. The extremes remain diverse, because

subject, method, and object are not posited as *the one identical concept*; the
12.239 syllogism is therefore always the formal syllogism; the premise in which the subject posits the form on its side as its method is an *immediate* determination and contains therefore the determinations of the form – as we have seen, of definition, division, and so forth[71] – as matters of fact *found ready-made in the subject*. In true cognition, on the contrary, method is not only an aggregate of certain determinations, but the determinateness in-and-for-itself of the concept, and the concept is the middle term only because it equally has the significance of the objective; in the conclusion, therefore, the objective does not attain only an external determinateness by virtue of the method, but is posited rather in its identity with the subjective concept.

1. Accordingly, what constitutes the method are the determinations of the concept itself and their connections, and these we must now examine in the significance that they have as determinations of the method. – In this, we must begin from the *beginning*. We spoke of this beginning at the very beginning of the Logic,[72] and also in connection with subjective cognition,[73] and we showed that, when not performed arbitrarily and in the absence of categorial sensitivity, though it may seem to present many difficulties, it is nevertheless of an extremely simple nature. Because it is the beginning, its content is an *immediate*, but one that has the meaning and the form of *abstract universality*. Or be it a content of *being*, or of *essence* or of the *concept*, inasmuch as it is *something immediate*, it is *assumed*, *found in advance*, *assertoric*. But first of all it is not an immediate of *sense-intuition* or of *representation*, but of *thought*, which because of its immediacy can also be called a supersensuous, *inner intuiting*. The immediate of sense-intuition is a *manifold* and a *singular*. Cognition, on the contrary, is a thinking that conceptualizes; its beginning, therefore, is also *only in the element of thought*, a *simple* and a *universal*. – We spoke of this form earlier, in connection with definition.[74] At the beginning of finite cognition universality is likewise recognized as an essential determination, but only as thought – and concept determination in opposition to being. In fact this *first* universality is an *immediate* universality, and for that reason it has equally the significance of *being*, for being is precisely this abstract self-reference. Being has no need of further derivation, as if it came to the abstract element of definition only because taken from the intuition of the senses or elsewhere, and in so far as it can be pointed at. This pointing and deriving involve a

[71] Cf. above, 12.209.
[72] GW 11.34ff., which is the edition to which Hegel is referring; but cf. above, 21.53ff.
[73] Cf. above, 12.215. [74] Cf. above, 12.210.

mediation that is more than a mere beginning, and is a mediation of a kind that does not belong to the comprehension of thought, but is rather the elevation of representation, of empirical and ratiocinative consciousness, to **12.240** the standpoint of thinking. According to the currently accepted opposition of thought, or concept, and being, it passes as a very important truth that no being belongs as yet to thought as thought, and that being has a ground of its own independent of thought. But the simple determination of *being* is in itself so poor that, if for that reason alone, not much fuss ought to be made about it; the universal is immediately itself this immediate because, as abstract, it is also the abstract self-reference which is being. In fact, the demand that being should be exhibited has a further, inner meaning in which more is at issue than just this abstract determination; implied in it is the demand for *the realization of the concept*, a realization that is missing at the *beginning* itself but is rather the goal and the business of the entire subsequent development of cognition. Further, inasmuch as the *content* of the beginning is to be justified and authenticated as something true or correct by being exhibited in inner or outer perception, it is no longer the *form* of universality as such that is meant, but its determinateness, about which more in a moment. The authentication of the *determinate content* with which the beginning is made seems to lie *behind* it, but is in fact to be regarded as an advance, in so far as it is a matter of conceptual cognition.

The beginning, therefore, has for the method no other determinateness than that of being the simple and universal; this is precisely the *determinateness* that makes it deficient. Universality is the pure, simple concept, and the method, as the consciousness of this concept, is aware that universality is only a moment and that in it the concept is still not determined in and for itself. But with this consciousness that would want to carry the beginning further only for the sake of method, the method is only a formal procedure posited in external reflection. Where the method, however, is the objective and immanent form, the immediate character of the beginning must be a lack *inherent* in the beginning itself, which must be endowed with the impulse to carry itself further. But in the absolute method the universal has the value not of a mere abstraction but of the objective universal, that is, the universal that is *in itself* the *concrete totality*, but a totality as yet not *posited*, not yet *for itself*. Even the abstract universal is as such, when considered conceptually, that is, in its truth, not just anything *simple*, but is, as *abstract*, already *posited* afflicted by a *negation*. For this reason also *there is* nothing so simple and so abstract, be it in *actuality* or in *thought*, as is commonly imagined. Anything as simple as that is a mere *presumption* that

has its ground solely in the lack of awareness of what is actually there. – We said earlier that the beginning is made with the immediate;[75] the *immediacy*
12.241 *of the universal* is the same as what is here expressed as the *in-itself* that is without *being-for-itself*. – One may well say, therefore, that every beginning must be made with the *absolute*, just as every advance is only the exposition of it, in so far as *implicit in existence* is the concept.[76] But because the absolute exists at first only *implicitly*, *in itself*, it equally is *not* the absolute nor the posited concept, and also not the idea, for the *in-itself* is only an abstract, one-sided moment, and this is what they are. The advance is not, therefore, a kind of *superfluity*; this is what it would be if that which is at the beginning were already the absolute; the advance consists rather in this, that the universal determines itself and is the universal *for itself*, that is, equally a singular and a subject. Only in its consummation is it the absolute.

It may also be mentioned that a beginning which is *in itself* a concrete totality may as such also be *free* and its immediacy have the determination of an *external existence*; the *germ* of *anything living*, and *subjective* purpose in general, have shown themselves to be such beginnings; hence both are themselves *impulses*. The non-spiritual and inanimate, on the contrary, are the concrete concept only as *real possibility*; *cause* is the highest stage in which the concrete concept has, as the beginning in the sphere of necessity, an immediate existence; but it is not yet a subject that maintains itself as such in the course of its effective realization. The *sun*, for instance, and in general all things inanimate, are determinate concrete existences in which real possibility remains an *inner* totality; the moments of the latter are not *posited* in them in subjective form and therefore, in so far as they are realized, they attain concrete existence through *other* corporeal individuals.

2. The concrete totality which makes the beginning possesses as such, within it, the beginning of the advance and development. As concrete, it is *differentiated in itself*, but because of its *initial immediacy*, this first *differentiation* is to start with a *diversity*. However, as self-referring universality, as subject, the immediate is also the *unity* of this diversity. – This reflection is the first stage of the forward movement – the emergence of *non-indifference*, *judgment*, and *determining* in general. Essential is that the method find, and recognize, the *determination* of the universal within it. Whatever in this abstractive generation of the universal is left out of the concrete is then picked up, still externally, by the finite cognition of the

[75] Cf. above, 12.210. [76] *das Ansichseiende ist der Begriff*.

understanding. This is how the latter operates. The absolute method, on the contrary, does not behave in this manner of external reflection but takes the determinate from its subject matter, for it is itself its immanent principle and its soul. – This is what Plato demanded of cognition, that *it* **12.242** *should consider things in and for themselves*; on the one hand, that it should consider them in their universality; on the other hand, that it should not stray away from them while it grasps at circumstances, examples, and comparisons, but, on the contrary, should keep only them in view before it and bring to consciousness what is immanent in them. – To this extent the method of absolute cognition is *analytic*. That the method finds the further determinations of its initial universal simply and solely in this universal, constitutes the concept's absolute objectivity, of which the method is the certainty. – Equally so, however, is the method *synthetic*, for its subject matter, while immediately determined as the *simple universal*, through the determinateness which it has in its very immediacy and universality, proves to be an *other*. Yet this connection in diversity that the subject matter is thus in itself, is no longer a synthesis as understood in finite cognition; the no less thoroughly analytic determination of the subject matter, the fact that the connection is within the *concept*, already distinguishes it fully from the latter synthesis.

This no less synthetic than analytic moment of the *judgment* through which the initial universal determines itself from within itself as the *other of itself* is to be called the *dialectical moment*. *Dialectic* is one of those ancient sciences that have been the most misjudged in the metaphysics of the moderns, and in general also by popular philosophy, both ancient and recent. Diogenes Laërtius said of Plato that, just as Thales was the founder of natural philosophy and Socrates of moral philosophy, so Plato was the founder of the third of the sciences that belong to philosophy, of *dialectic* – a contribution for which he was highly esteemed by the ancients but that often goes quite unnoticed by those who have the most to say about him.[77] Dialectic has often been regarded as an *art*, as if it rested on a subjective *talent* and did not belong to the objectivity of the concept. What shape it received in Kantian philosophy, and with what result, has already been indicated in representative examples of that philosophy's view.[78] It must be regarded as an infinitely important step that dialectic is once more being

[77] See Diogenes Laertius, *Vitae philosophorum*, Vol. 1, ed. Miroslav Marcovich (Stuttgart: B.G. Teubner, 1999), Book 3, §56; *Lives of Eminent Philosophers*, Vol. 1, trans. R. D. Hicks (Cambridge, MA: Harvard University Press, 1965).

[78] i.e. Hegel's discussion of Kant's Dialectic of Pure Reason. Cf. above, 12.157–158; 21.180ff.

recognized as necessary to reason, although the result that must be drawn from it is the opposite than Kant drew.

When dialectic is not presented, as it generally is, as something incidental, it usually assumes the following more precise form. It is shown of a subject matter or other (for instance: world, movement, point, and so on) that a certain determination accrues to it (for instance, in the order of the just mentioned examples: finitude in space or time, being at *this* place, absolute negation of space), also the opposite determinations can then just as necessarily be shown to accrue to it (for example: infinity in space and time, not-being at this place, reference to space and hence spatiality). The older Eleatic school directed its dialectic especially against motion; Plato
12.243 commonly did it against accepted notions and concepts of his time, in particular those of the Sophists, but also against the pure categories and the determinations of reflection; the later and more sophisticated form of skepticism extended it not only to the immediate so-called facts of consciousness and the maxims of ordinary life, but also to all scientific concepts. Now the conclusion drawn from this kind of dialectic is in general the *contradiction* and *nullity* of the asserted claims. But this can happen in two ways – either in the objective sense, that the *subject matter* that thus contradicts itself internally cancels itself and is a non-thing (this was, for instance, the conclusion of the Eleatics, who denied the *truth* of the world, of movement, of the point); or in the subjective sense, that *cognition is deficient*. Now understood in this last subjective sense, the conclusion may be taken in two further ways. It may mean that it is this dialectic itself that generates the artifice of an illusion. This is the common view of the so-called healthy common sense that takes its stand on the evidence of the *senses* and on *customary notions* and *claims*, at times quietly, like Diogenes the cynic did, who demonstrated the vacuity of the dialectic of motion by silently walking up and down; but often by getting itself all worked up, declaring that dialectic is mere foolery or, when important ethical matters are at issue, the criminal attempt at unsettling essentially solid norms and providing excuses for the wicked – a view we see directed in the Socratic dialectic against that of the Sophists, with an ire that, turned into the opposite direction, even cost Socrates his life. As for the vulgar refutation that opposes to thinking, as Diogenes did, *sensuous consciousness* and in this latter believes that it finds the truth, this we must leave to itself; but in so far as dialectic sublates ethical determinations, we must have confidence in reason that it will know how to reinstate them, but reinstate them in their truth and in the consciousness of their right, though also of their limitations. – Yet another view is that the result of subjective nullity has nothing to do with dialectic

itself, but that it affects the cognition against which it is directed and, in the view of skepticism and likewise of the Kantian philosophy, *cognition in general*.

The fundamental prejudice here is that dialectic has *only a negative result* – a point about which more in a moment. First, regarding the said *form* in which dialectic usually makes its appearance, it is to be observed that according to that form the dialectic and its result affect a *subject matter* which is previously assumed or also the subjective *cognition* of it, and declare either the latter or the subject matter to be null and void, while, on the contrary, no attention is given to the *determinations* which are exhibited in the subject matter as in a *third* thing and presupposed as valid for themselves. To have called attention to this uncritical procedure has been the infinite merit of the Kantian philosophy, and in so doing to have **12.244** given the impetus to the restoration of logic and dialectic understood as the examination of *thought determinations in and for themselves*. The subject matter, as it is apart from thought and conceptualization, is a picture representation or also a name; it is in the determinations of thought and of the concept that it *is* what it *is*. In fact, therefore, everything rests on these determinations; they are the true subject matter and content of reason, and anything else that might be understood by subject matter and content in distinction from them has meaning only through them and in them. It must not therefore be taken as the fault of a subject matter or of the cognition that these determinations, because of what they are and the way they are externally joined, prove to be dialectical. On this assumption, the subject matter and the cognition are imagined to be a subject on which the *determinations* are brought to bear, in the form of predicates, properties, or self-subsistent universals, as fixed and independently correct, so that these determinations are brought into dialectical relations and incur contradiction only by extraneous and contingent conjunction in and by a third thing. But this kind of external and fixed subject of imagination and understanding, and also these abstract determinations, cannot be regarded as *ultimates*, as secure and permanent substrates. On the contrary, they are to be regarded as themselves immediate, precisely the kind of presuppositions and starting points which, as we have shown above,[79] must succumb to dialectic in and for themselves, because they are to be taken as *in themselves* the concept. The same applies to all oppositions that are assumed as fixed, as for example the finite and the infinite, the singular and the universal. These are not in contradiction through some external conjoining; on the

[79] Cf. above, 12.240–241.

contrary, as an examination of their nature shows, they are a transition in and for themselves; the synthesis and the subject in which they appear is the product of their concept's own reflection. If a consideration that avoids the concept stops short at their external relation, isolates them and leaves them as fixed presuppositions, it is the concept that, on the contrary, will fix its sight on them, move them as their soul and bring out their dialectic.

Now this is the very standpoint indicated above[80] from which a universal *prius*, *considered in and for itself*, proves to be the other of itself. Taken quite generally, this determination can be taken to mean that what is at first *immediate* is therewith posited as *mediated*, as *referred* to an other, or that the universal is posited as a particular. The *second* universal that has thereby arisen is thus the *negative* of that first and, in view of subsequent developments, the *first negative*. From this negative side, the immediate has *perished* in the other; but the other is essentially not an *empty negative*, the
12.245 *nothing* which is normally taken to be the result of dialectic, but is rather the *other of the first*, the *negative* of the *immediate*; it is therefore determined as the *mediated* – *contains* as such the *determination of the first* in it. The first is thus essentially *preserved* and contained also in the other. – To hold fast to the positive in *its* negative, to the content of the presupposition in the result, this is the most important factor in rational cognition; what is more, it takes only the simplest of reflections to be convinced of the absolute truth and necessity of this requirement, and as for examples of proofs that testify to this, the whole Logic consists of such proofs.

So what we now have, taken first or also immediately, is the *mediated*, also a *simple* determination, for the *first* has perished in it, and only the *second* is therefore at hand. Now since the first is *contained* in the second, and this second is the truth of the first, this unity of the two can be expressed in the form of a proposition in which the immediate is placed as the subject but the mediated as its predicate; for example, "the finite is infinite," "one is many," "the singular is the universal." The inadequacy of the form of such propositions and judgments is however obvious. In connection with *judgment* it was shown that its form in general, and most of all the immediate form of the *positive* judgment, is incapable of holding within its grasp the speculative content and the truth.[81] Its closest complement, the *negative* judgment, would have to be brought in at least in equal measure. In judgment the first, as subject, conveys the reflective semblance of an independent subsistence, whereas it is in fact sublated in the predicate as in its other; this negation is indeed contained in the content of the above

[80] Cf. above, 12.242. [81] Cf. above, 12.64.

propositions, but their positive form contradicts the content; consequently, what is contained in them is not posited – whereas this was precisely the intent behind the use of a proposition.

The second determination, the *negative* or *mediated* determination, is moreover at the same time *the one that mediates*. At first it may be taken as a simple determination, but its truth is that it is a *reference* or *relation*; for it is the negative, *but the negative of the positive*, and it includes this positive within itself. It is the *other*, therefore, not of a one to which it is indifferent; in that case it would not be an *other*, nor a reference or relation. It is rather the *other in itself*, the *other of an other*; hence it includes *its* own other within itself and is consequently the *contradiction*, the *posited dialectic*, *of itself*. – Because the first or the immediate is the concept *in itself* or *implicitly*, and therefore is the negative also only *implicitly*, the dialectical moment in it consists in the positing of the *difference* that is *implicitly* contained in it. The second is on the contrary itself the *determinate*, the *difference* or **12.246** relation; hence the dialectical moment consists in its case in the positing of the *unity* contained within it. – For this reason, if the negative, the determinate, relation, judgment, and all the determinations falling under this second moment, do not appear by themselves already as contradiction, as dialectical, this is solely a defect on the part of thinking that fails to bring its thoughts together. For the material, the *opposed* determinations in *one connection*, are already *posited*, already present for thought. But formal thinking makes identity its law, lets the contradictory content that it has before it fall into the sphere of representation, in space and time, where the contradictory is held in *external moments*, next to and following each other, parading before consciousness without reciprocal contact. The firm principle that formal thinking lays down for itself here is that contradiction cannot be thought. But in fact the thought of contradiction is the essential moment of the concept. Formal thought does in fact think it, only it at once looks away from it and stating its principle it only passes over from it into abstract negation.

Now the negativity just considered constitutes the *turning point* of the movement of the concept. It is the *simple point of the negative* self-*reference*, the innermost source of all activity, of living and spiritual self-movement; it is the dialectical soul which everything true possesses and through which alone it is true; for on this subjectivity alone rests the sublation of the opposition between concept and reality, and the unity which is truth. – The *second* negative at which we have arrived, the negative of the negative, is this sublating of contradiction, and it too, just like contradiction, is not an *act of external reflection*; for it is on the contrary the *innermost*,

objective moment of the life of spirit by virtue of which a *subject* is a *person*, is *free*. – The *self-reference of the negative* is to be regarded as the *second premise* of the entire syllogism. If the terms *analytic* and *synthetic* are used as opposites, the *first* premise may be regarded as the *analytic* moment, for in it the immediate relates to its other immediately and therefore *passes over*, or rather has passed over, into it – though this connection, as already remarked, is for this very reason also synthetic, for it is *its* other that it passes over into. The second premise considered here may be defined as *synthetic*, because it is the connection of the *differentiated*, *as differentiated*, to *that from which it is differentiated*. – Just as the first premise is the moment of *universality* and *communication*, so is the second determined by *singularity* – a singularity which in referring to the other is at first exclusive, for itself,
12.247 and different. The negative appears as the *mediating* factor, because it holds itself and the immediate of which it is the negation within itself. In so far as these two determinations are taken as referring to each other externally in some relation or other, the negative is only the *formal* mediating factor; but, as absolute negativity, the negative moment of absolute mediation is the unity which is subjectivity and soul.

In this turning point of the method, the course of cognition returns at the same time back into itself. This negativity is as self-sublating contradiction the *restoration* of the *first immediacy*, of simple universality; for the other of the other, the negative of the negative, is immediately the *positive*, the *identical*, the *universal*. In the whole course, if one at all cares *to count*, this *second* immediate is *third* to the first immediate and the mediated. But it is also *third* to the first or formal negative and to the absolute negativity or second negative; now in so far as that first negative is already the second term, the term counted as *third* can also be counted as *fourth*, and instead of a *triplicity*, the abstract form may also be taken to be a *quadruplicity*; in this way the negative or the *difference* is counted as a *duality*. – The third or the fourth is in general the unity of the first and the second moment, of the immediate and the mediated. – That it is this *unity*, or that the entire form of the method is a *triplicity*, is indeed nothing but the merely superficial, external side of cognition; but to have also demonstrated this superficiality, and to have done it in the context of a specific application (for the abstract form of number has been around for a long time, as is well known, but without conceptual comprehension and therefore without any result) is again to be regarded as an infinite merit of the Kantian philosophy.[82] The *syllogism*, or the threefold, has always been recognized to be the universal

[82] Bilo.

form of reason; but it has had in general the value of a wholly external form that does not determine the nature of the content; moreover, since in its formalism it gets caught up in the understanding's determination of mere *identity*, it lacks the essential *dialectical* moment of *negativity*; and yet this moment enters into the triplicity of the determinations, because the third term is the unity of the two first determinations and these, since they are diverse, can be in unity only *as sublated*. – Formalism, it is true, has also seized hold of triplicity, attending to its empty *schema*; the shallow nonsense and the barrenness of the so-called *construction* of modern philosophy, that consists in nothing but fastening that formal schema everywhere for the sake of external order, with no concept or immanent determination, has **12.248** rendered that form tedious and has given it a bad name. Yet the insipidity of this use cannot rob it of its inner worth, and the fact that the shape of reason was discovered, albeit without conceptual comprehension at first, is always to be highly valued.

Now, on closer examination, the *third* is the immediate, but the immediate *through sublation of mediation*, the simple through the *sublating of difference*, the positive through the sublating of the negative; it is the concept that has realized itself through its otherness, and through the sublating of this reality has rejoined itself and has restored its absolute reality, its *simple* self-reference. This *result* is therefore the *truth*. It is *just as much* immediacy *as* mediation – though these forms of judgments, that the third *is* immediacy and mediation, or that it *is the unity* of the two, are not capable of grasping it, for it is not a dormant third but, exactly like this unity, self-mediating movement and activity. – Just as that with which we began was the *universal*, so the result is the *singular*, the *concrete*, the *subject*; what the former is *in itself*, the latter is now equally *for itself*: the universal is *posited* in the subject. The two first moments of triplicity are *abstract*, untrue moments that are dialectical for that very reason, and through this their negativity make themselves into the subject. *For us* at first, the concept itself is *both* the universal that exists in itself *and* the negative that exists for itself, and also the third term that exists in and for itself, the *universal* that runs through all the moments of the syllogism; but this third is the conclusion in which the concept mediates itself with itself through its negativity and is thereby posited *for itself* as the *universal* and the *identity of its moments*.

Now this result, as the whole that has withdrawn into itself and is *identical* with itself, has given itself again the form of *immediacy*. Consequently, it is now itself all that *the starting point* had determined itself to be. As simple self-reference it is a universal, and in this universal the *negativity* that

constituted its dialectic and mediation has likewise withdrawn into *simple determinateness*, which can again be a beginning. It may seem at first that this cognition of the result is an analysis of it and would therefore have to dissect these determinations again, and the course that it went through in order to come to be – the course that we have examined. But if the subject matter were in fact treated analytically in this manner, it would belong to that stage of the idea considered above,[83] a mode of cognition that searches for its subject matter and only states of it what it *is*, without the necessity of its concrete identity and of its concept. But the method of truth that comprehends the subject matter, though analytic as we have seen, since it remains strictly within the concept, is however equally synthetic, for
12.249 through the concept the subject matter is determined as dialectical and as other.[84] On the new foundation that the result has now constituted as the subject matter, the method remains the same as in the preceding subject matter. The difference concerns solely the status of the foundation as such; although it is certainly still a foundation, its immediacy is only *form*, since it was a result as well; hence its determinateness as content is no longer something merely taken up but is *deduced* and *proved*.

It is here that the *content* of cognition first enters as such into the circle of consideration, because as deduced it now belongs to the method. The method itself expands with this moment into a *system*. – With respect to content, the beginning has to be for the method at first wholly indeterminate; to this extent the method appears as the merely formal soul, for which and by which the beginning was determined simply and solely only according to form, that is to say, as the immediate and universal. In the course of the movement we have indicated, the subject matter has received a *determinateness* for itself – and this determinateness is a *content*, for the negativity that has withdrawn into simplicity is the sublated form, and stands as simple determinateness over against its development, and in the first instance against its very opposition to universality.

Now since this determinateness is the proximate truth of the indeterminate beginning, it denounces the incompleteness of the latter, and it also denounces the method itself which, starting from that beginning, was only formal. This can now be expressed as the henceforth determinate demand that the beginning, since as against the determinateness of the result it is itself something determinate, ought to be taken not as immediate, but as mediated and deduced. This may appear as the demand for an infinite *retrogression* in proof and deduction; just as from the newly obtained

[83] Cf. above, 12.209. [84] Cf. above, 12.242.

beginning a result likewise emerges as the method runs its course, so that the movement would roll on *forwards* to infinity as well.

It has been repeatedly shown that the infinite progression as such belongs to a reflection void of concept; the absolute method, which has the concept for its soul and content, cannot lead into it. Even such beginnings as *being*, *essence*, *universality*, may seem at first to be of the kind that possess the full universality and complete absence of content that is required for an entirely formal beginning, such as the beginning is supposed to be, and therefore not to require or allow, as absolutely first beginnings, further regress. Since they refer purely to themselves, they are immediate and indeterminate, and so they do not of course have in them the difference which is straightaway posited in some other beginning between the universality of its form and its content. But the very indeterminacy which these logical beginnings have as their sole content is what constitutes their **12.250** determinateness; this determinateness consists in their negativity, as sublated mediation; the particularity of this negativity gives a particularity also to their indeterminacy, and it is by virtue of it that *being*, *essence*, and *universality*, are differentiated. Now the determinateness that accrues to them when taken for themselves is their *immediate determinateness*, and this is just as immediate as that of any content and in need, therefore, of derivation; for the method it is a matter of indifference whether the determinateness is taken as determinateness of *form* or of *content*. That it gives itself a determination by the first of its results does not mean that, in fact, it is thereby set on a new footing; it remains neither more nor less formal than before. For since the method is the absolute form, the concept that knows itself and everything as concept, there is no content that would stand out over against it and determine it as a one-sided external form. Hence, just as the lack of content of the said beginnings does not make them absolute beginnings, so too it is not the content that would as such lead the method into the infinite progress forwards or backwards. In one respect, the *determinateness* that the method generates for itself in its result is the moment through which it is self-mediation and converts *the immediate into a mediated beginning*. But conversely, it is through that determinateness that this mediation of the method runs its course; it goes *through* a *content*, as through a seeming *other* of itself, back to its beginning, in such a way that it does not merely restore that beginning, albeit as *determinate*, but that the result is equally the sublated determinateness, and hence also the restoration of the first immediacy in which it began. This it accomplishes as *a system of totality*. We now have to consider it in this determination.

The determinateness which was the result is, as we have shown,[85] itself a new beginning because of the form of simplicity into which it has withdrawn; since this beginning is distinguished from the one preceding it by this very determinateness, cognition rolls onwards from content to content. First of all, this forward movement determines itself in that it begins from simple determinacies, and the following become ever *richer and more concrete*. For the result contains its beginning and its course has enriched it with a new determinateness. The *universal* constitutes the foundation; the advance is not to be taken, therefore, as a *flowing* from *other* to *other*. In the absolute method, the concept *maintains* itself in its otherness, the universal in its particularization, in judgment and reality; at each stage of further determination, the universal elevates the whole mass of its preceding content, not only not losing anything through its dialectical advance, or leaving it behind, but, on the contrary, carrying with itself all
12.251 that it has gained, inwardly enriched and compressed.

This *expansion* may be regarded as the moment of content, and in the whole as the first premise; the universal is *communicated* to the wealth of content, is immediately received in it. But the relation has also a second, negative or dialectical side. The enrichment proceeds in the *necessity* of the concept, it is contained by it, and every determination is a reflection into itself. Each new stage of *exteriorization*, that is, of *further determination*, is also a withdrawing into itself, and the greater the *extension*, just as dense is the *intensity*. The richest is therefore the most concrete and the *most subjective*, and that which retreats to the simplest depth is the mightiest and the most all-encompassing. The highest and most intense point is the *pure personality* that, solely by virtue of the absolute dialectic which is its nature, equally embraces and holds *everything within itself*, for it makes itself into the supremely free – the simplicity which is the first immediacy and universality.

It is in this manner that each step of the *advance* in the process of further determination, while getting away from the indeterminate beginning, is also a *getting back closer* to it; consequently, that what may at first appear to be different, the *retrogressive grounding* of the beginning and the *progressive further determination* of it, run into one another and are the same. The method, which thus coils in a circle, cannot however anticipate in a temporal development that the beginning is as such already something derived; sufficient for an immediate beginning is that it be simple universality. Inasmuch as this is what it is, it has its complete condition; and

[85] Cf. above, 12.248, 249.

there is no need to deprecate the fact that it may be accepted only *provisionally* and *hypothetically*. Whatever might be adduced against it – about the limitations of human cognition; about the need to reflect critically on the instrument of cognition before getting to the fact itself – all these are themselves *presuppositions*, *concrete determinations* that as such carry with them the demand for mediation and grounding. Therefore, since they formally have no advantage over *beginning* with the fact itself as they protest against, and, because of their more concrete content, are on the contrary all the more in need of derivation, singling them out for special attention is to be considered as empty presumption. They have an untrue content, for they make into something incontestable and absolute what is known to be finite and untrue, namely a *restricted* cognition determined as *form* and *instrument in opposition to* its *content*; this untrue cognition is itself also the form, the retroactive search for grounds. – The method of truth also knows that the beginning is incomplete, because it is a beginning; but at the same time it knows that this incompleteness is necessary, because truth is but the coming-to-oneself through the negativity of immediacy. The impatience that would *merely* transcend the *determinate* – be it called beginning, object, the finite, or in whatever other form it is otherwise taken – in order that one would find oneself immediately in the absolute, has nothing before it as cognition but the empty negative, the abstract infinite. Or what it has before it is a *presumed* absolute, presumed because not *posited*, not *comprehended*; comprehended it will be only through the *mediation* of cognition, of which the universal and immediate are a moment, and as for the truth itself, it resides only in the extended course of mediation and at the end. – To meet the subjective need and the impatience that come with not knowing, one may well provide an overview of the *whole in advance* – by means of a division for reflection that, in the manner of finite cognition, gives the particular of the universal as *already there*, to be waited for as the science progresses. Yet this affords nothing more than a picture for *representation*; for the true transition from the universal to the particular and to the whole which is determined in and for itself and in which that first universal is in truth itself again a moment – this transition is alien to the division of reflection and is the exclusive mediation of science itself. **12.252**

By virtue of the nature of the method just indicated, the science presents itself as a *circle* that winds around itself, where the mediation winds the end back to the beginning which is the simple ground; the circle is thus a *circle of circles*, for each single member ensouled by the method is reflected into itself so that, in returning to the beginning it is at the same time the beginning of a new member. Fragments of this chain are the single sciences,

each of which has a *before* and an *after* – or, more accurately said, *has in possession* only the *before* and in its conclusion *points to its after*.

So the logic also has returned in the absolute idea to this simple unity which is its beginning; the pure immediacy of being, in which all determination appears at first as extinguished or removed by abstraction, is the idea that through mediation, that is, the sublation of mediation, has come to the likeness corresponding to it. The method is the pure concept that only relates to itself; it is, therefore, the *simple self-reference* which is being. But it now is also the *fulfilled concept*, the *concept that comprehends* itself *conceptually*, being as the *concrete* and just as absolutely *intensive* totality. – In conclusion, there remains only this to be said of this idea, that in it, *in the first place*, the *science of logic* has apprehended its own concept. In the sphere of being, at the beginning of its *content*, its concept appears as a knowledge external to that content in subjective reflection. But in the idea of absolute cognition, the concept has become the idea's own content. The idea is itself the pure concept that has itself as its subject matter and which, as it runs itself as subject matter through the totality of its determinations,
12.253 builds itself up to the entirety of its reality, to the system of science, and concludes by apprehending this conceptual comprehension of itself, hence by sublating its position as content and subject matter and cognizing the concept of science. – *In second place*, this idea is still logical; it is shut up in pure thought, the science only of the divine *concept*. Its systematic exposition is of course itself a realization, but one confined within the same sphere. Because the pure idea of cognition is to this extent shut up within subjectivity, it is the *impulse* to sublate it, and pure truth becomes as final result also the *beginning of another sphere and science*. It only remains here to indicate this transition.

The idea, namely, in positing itself as the absolute *unity* of the pure concept and its reality and thus collecting itself in the immediacy of *being*, is in this form as *totality – nature*. – This determination, however, is nothing that *has become*, is not a *transition*, as was the case above when the subjective concept in its totality *becomes objectivity*, or the *subjective purpose becomes life*.[86] The pure idea into which the determinateness or reality of the concept is itself raised into concept is rather an absolute *liberation* for which there is no longer an immediate determination which is not equally *posited* and is not concept; in this freedom, therefore, there is no transition that takes place; the simple being to which the idea determines itself remains perfectly transparent to it: it is the idea that in its determination remains

[86] Cf. above, 12.125–126; 160–181.

with itself. The transition is to be grasped, therefore, in the sense that the idea *freely discharges*[87] itself, absolutely certain of itself and internally at rest. On account of this freedom, the *form of its determinateness* is just as absolutely free: the *externality of space and time* absolutely existing for itself without subjectivity. – Inasmuch as this externality is only in the abstract determinateness of being and is apprehended by consciousness, it is as mere objectivity and external life; within the idea, however, it remains in and for itself the totality of the concept, and science in the relation of divine cognition to nature. But what is posited by this first resolve of the pure idea to determine itself as external idea is only the mediation out of which the concept, as free concrete existence that from externality has come to itself, raises itself up, completes this self-liberation *in the science of spirit*, and in the science of logic finds the highest concept of itself, the pure concept conceptually comprehending itself.

[87] *entläßt*.

APPENDIX

Hegel's Logic in its revised and unrevised parts

It is a matter of speculation how Hegel would have revised Part Two of Volume One (Book Two in the Lasson edition) and Volume Two (Book Three in the Lasson edition) of the Logic if he had lived to complete the planned work of revision. Some clues may, however, be derived from the changes that Hegel brought to the 1817 Encyclopedia Logic in its new edition of 1830. In this last edition, Hegel rearranged the ordering of the categories of "essence." He replaced the title of the first grouping, which in 1817 was "The Pure Determinacies of Reflection," with "Essence as the Ground of *Existenz*"; moved the category of "*Existenz*," which in 1817 was in the second grouping under the general heading of "Appearance," to the first grouping, and replaced it in the second grouping of 1830, still entitled "Appearance," with "The World of Appearances." As used by Hegel in all the texts of the Logic that we have, "*Existenz*" is an ontological term. Like the Scholastic *existentia* which is the counterpart of *essentia*, it signifies the being of a thing inasmuch as it is internally grounded by the thing's essence. Within the Logic, *Existenz* stands reflectively to "essence" as "*Dasein*" stands immediately to "being." On the face of it, the 1830 grouping of the categories of essence thus seems to be the more natural one, for it more clearly brings out the close conceptual connection between "essence" and "*Existenz*." This connection eventually develops into the idea of an internally cohesive world of variegated appearances, that is, "The World of Appearances" of the 1830 Encyclopedia Logic. One should think, therefore, that a new edition of the "Doctrine of Essence" of the Greater Logic would have followed more closely the headings and groupings of categories of the 1830 Encyclopedia. However, whether these changes would have amounted to a truly substantial conceptual reorientation of the Logic is of course open to question.

Also to be kept in mind is that the Encyclopedia Logic differs from the Greater Logic in sheer size: according to the pagination of the critical edition, there are 168 pages in the 1813 "Doctrine of Essence" as opposed

to 30 pages in the equivalent section of the 1830 Encyclopedia. And it also differs in scope. The one was intended as a textbook for university instruction; the other, as a theoretical treatise. Any contrast between the two can only be of limited value. Perhaps a more reliable indicator of any conceptual progression from the Nürnberg to the Berlin period might be the one part of the earlier Greater Logic which Hegel did in fact revise in Berlin, namely the "Doctrine of Being."[1] Here are the most significant changes:

(1) In 1832, Hegel added, in connection with "measure," some comments regarding the modal categories and critical of Spinoza's and Kant's treatment of these categories.[2] We have already commented on them in the main body of the Introduction, bringing out the conceptual importance of these comments.

(2) The 1832 text is considerably enlarged in comparison with that of 1812, by about one third, the extra material the result of a more detailed treatment of some of the categories and the addition of more "Remarks." These are notes that expand on historical and conceptual points connected with the subjects under consideration. Notable among them are the two extra Remarks on the nature and the foundations of calculus that Hegel added in 1832 to the one Remark (GW 11, 153ff.) of the 1812 edition.[3] The conceptual importance of these three additions has also been discussed in the main body of the Introduction.

(3) The 1832 edition has a more streamlined version of the conceptually awkward 1812 ordering of the categories of "*Dasein*" (or "immediate existence") in Chapter 2, and of "being-for-itself" in Chapter 3. "Reality" and "negation," which in 1812 are treated as independent headings, are not so treated in 1832 but reappear under "quality" as the two shifting moments that define the peculiarly immediate determinacy of *Dasein*.[4] It is possible that in a revised edition of the "Doctrine of Essence," "*Schein*" ("reflective shine"), which is the reflective counterpart of "reality," would have been dropped as an independent category (as it also is in the 1827/30 Encyclopedia)[5] but would be reintroduced instead as a moment of the first reflective determinacies of "essence," namely "identity," "difference," "diversity," and "contradiction." Each

[1] The changes are documented in the critical apparatus of GW 21.

[2] See above, Introduction, note 86. [3] See above, Introduction, note 82. [4] Cf. GW 21.98–99.

[5] So it was also in the lecture course on Logic of the 1831 summer term. Determinacies such as "identity" and "difference" are the by-products of the internal reflection of "essence" which acquire the "reflective shine" of having independent being. It's as if they were an external "shine" of essence. Cf. G. W. F. Hegel, *Vorlesungen über die Logik*, Vol. 10 (Hamburg: Meiner, 2001), pp. 137–138.

of these re-enacts in "essence" – but reflectively, and each in its own way – the shifting relation which "reality" and "negation" play out in "*Dasein*." "*Schein*" would appear in them as the lingering immediacy ("all that remains of the sphere of being,"[6] as Hegel puts it) that still affects them and makes them *seem* to have a reality independent of "essence." But it is also possible (and perhaps even more likely) that Hegel would have wanted to treat this lingering immediacy on its own, directly in connection with "essence," exactly as he did in 1812.

(4) In 1832, in connection with the transitions from one category of "being" to another, Hegel is more precise in his use of language. He avoids the language of reflectivity, which is more appropriate to the transitions of "essence," apparently in order to stress precisely the immediacy of such transitions.[7]

These are the main changes. To what extent, if any, they make for a substantial change in the orientation of Hegel's thought is of course a matter of interpretation.

[6] GW 11.241.

[7] Cf. John Burbidge's review of GW 11, *The Owl of Minerva*, 10.4 (1979), 5–7, where this difference in language is documented.

Bibliography

SOURCES CITED BY HEGEL

Aristotle. Analytica priora. In *Aristotelis opera*. Vol. 1. Edited by Immanuel Bekker. Berlin: Walter de Gruyter, 1960. Translated by A. J. Jenkinson as *Prior Analytics*. In *The Complete Works of Aristotle*. Vol. 1. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.

De Anima. In *Aristotelis opera*. Vol. 1. Edited by Immanuel Bekker. Berlin: Walter de Gruyter, 1960. Translated by J. A. Smith as *On the Soul*. In *The Complete Works of Aristotle*. Vol. 1. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.

Metaphysica. In *Aristotelis opera*. Vol. 2. Edited by Immanuel Bekker. Berlin: Walter de Gruyter, 1960. Translated by W. D. Ross as *Metaphysics*. In *The Complete Works of Aristotle*. Vol. 2. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.

Physica. In *Aristotelis opera*. Vol. 1. Edited by Immanuel Bekker. Berlin: Walter de Gruyter, 1960. Translated by R. P. Hardie and R. K. Gaye as *Physics*. In *The Complete Works of Aristotle*. Vol. 1. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.

In sophisticos elenchos. In *Aristotelis opera*. Vol. 1. Edited by Immanuel Bekker. Berlin: Walter de Gruyter, 1960. Translated by W. A. Pickard as *Sophistical Refutations*. In *The Complete Works of Aristotle*. Vol. 1. Edited by Jonathan Barnes. Princeton: Princeton University Press, 1984.

Barrow, Isaac. *Lectiones geometricae: In quibus (praesertim) generalia curvarum symptomata declarantur*. London, 1672.

Bayle, Pierre. *Dictionnaire historique et critique*, 11th edn. Paris, 1820. Reprinted, Geneva: Slatkine Reprints, 1969.

Berzelius, Jöns Jakob. *Lehrbuch der Chemie*. Vol. 3. Translated by F. Wöhler. Dresden, 1827.

Blumenbach, J. F. *De generis humani varietate nativa*. 3rd edn. Göttingen, 1795. In *Concepts of Race in the Eighteenth Century*. Vol. 4. Edited by Robert Bernasconi. Bristol: Thoemmes, 2001.

Böhme, Jakob. *Sämtliche Schriften*. Vol. 1, *Aurora, oder Morgenröthe im Aufgang* (1612). Edited by August Faust and Will-Erich Peuckert. Stuttgart: Fr. Frommanns, 1955.

Brutus, Decimus. Letter 401, to Cicero. In *Cicero's Letters to His Friends*. Vol. 3. The Loeb Classical Library, No. 230. Edited and translated by D. R. Shackleton Bailey. Cambridge, MA: Harvard University Press, 2001.

Carnot, Lazare. *Réflexions sur la métaphysique du calcul infinitésimal*. Paris, 1797.

Cavalieri, Francesco Bonaventura. *Exercitationes geometricae sex*. Bologna, 1647.

Geometria indivisibilibus continuorum nova quadam ratione promota. Bologna, 1653.

Descartes, René. *The Geometry of René Descartes* (1637). Translated by David Eugene Smith and Marcia L. Latham. La Salle, IL: Open Court, 1952. Includes a facsimile of the original French text.

Meditationes de prima philosophia (1641). In *Oeuvres de Descartes*. Vol. 7. Edited by Charles Adam and Paul Tannery. Paris: J. Vrin, 1964. Translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch as *Meditations on First Philosophy*. In *The Philosophical Writings of Descartes*. Vol. 2. Cambridge: Cambridge University Press, 1984.

Oeuvres complètes. Vol. 5. Edited by Victor Cousin. Paris: F. G. Levrault, 1824.

Diels, Hermann and Walter Kranz, eds. *Die Fragmente der Vorsokratiker*. 3 vols. Berlin: Weidmann, 1956.

Euclid. *Euclid's Elements*. Edited by Dana Densmore. Translated by Thomas L. Heath. Santa Fe, NM: Green Lion Press, 2002.

Euler, Leonhard. *Lettres à une princesse allemande sur divers sujets de physique et de philosophie*. Leipzig: Dyck, 1792–4.

Fichte, J. G. *Grundlage der gesammten Wissenschaftslehre* (1794/95). In *Gesamtausgabe der bayerischen Akademie der Wissenschaften*. Series 1, Vol. 2, *Werke 1793–95*. Edited by Reinhard Lauth and Hans Jacob. Stuttgart and Bad-Canstatt: Frommann-Holzboog, 1965. Translated and edited by Peter Heath and John Lachs in *Foundation for the Entire Science of Knowledge*. Cambridge: Cambridge University Press, 1982.

Das System der Sittenlehre nach den Prinzipien der Wissenschaftslehre (1798). Translated and edited by Daniel Breazeale and Günter Zöller in *The System of Ethics According to the Principles of the Wissenschaftslehre*. Cambridge: Cambridge University Press, 2005.

"Versuch einer neuen Darstellung der Wissenschaftslehre: Einleitung." In *Gesamtausgabe der bayerischen Akademie der Wissenschaften*. Series 1, Vol. 4, *Werke 1797–98*. Edited by Reinhard Lauth and Hans Gliwitzky. *Werke: Gesamtausgabe*, Series 1, Vol. 1, pp. 247–265. Translated and edited by Daniel Breazeale in *An Attempt at a New Presentation of the Wissenschaftslehre* (1797/98): "[First] Introduction to the *Wissenschaftslehre*." In *Introductions to the Wissenschaftslehre and Other Writings*. Indianapolis, IN: Hackett, 1994.

"Versuch einer neuen Darstellung der Wissenschaftslehre: Zweite Einleitung in die Wissenschaftslehre." In *Gesamtausgabe der bayerischen Akademie der Wissenschaften*. Series 1, Vol. 4, *Werke 1797–98*. Edited by Reinhard Lauth and Hans Gliwitzky. Stuttgart and Bad-Canstatt: Frommann-Holzboog,

1970. Translated and edited by Daniel Breazeale in *An Attempt at a New Presentation of the Wissenschaftslehre* (1797/98): "Second Introduction to the *Wissenschaftslehre*." In *Introductions to the Wissenschaftslehre and Other Writings*. Indianapolis, IN: Hackett, 1994.

Goethe, Johann Wolfgang von. *Zur Farbenlehre: Didaktischer Teil* (1808). In *Goethes Werke*. Vol. 13. Hamburg: Christian Wegner, 1966.

Haller, Albrecht, Baron von. *Hallers Gedichte*. Edited by Ludwig Hirzel. 3 vols. Bibliothek alterer Schriftwerke der deutschen Schweiz, 1882.

Horace. *Odes and Epodes*. The Loeb Classical Library, No. 33. Edited and translated by Niall Rudd. Cambridge, MA: Harvard University Press, 2004.

Jacobi, Friedrich Heinrich. *David Hume über den Glauben, oder Idealismus und Realismus, Ein Gespräch*. Breslau, 1787. Translated and edited by George di Giovanni in *Friedrich Heinrich Jacobi: The Main Philosophical Writings and the Novel* Allwill. Montreal and Kingston: McGill-Queen's University Press, 1994.

Friedrich Heinrich Jacobi's Werke. Edited by J. F. Köppen and C. J. F. Roth, 6 vols. Leipzig: Gerhard Fleischer, 1812–1825. Reprinted, Darmstadt: Wissenschaftliche Buchgesellschaft, 1968.

Jacobi an Fichte. Hamburg, 1799. Translated and edited by George di Giovanni in *Friedrich Heinrich Jacobi: The Main Philosophical Writings and the Novel* Allwill. Montreal and Kingston: McGill-Queen's University Press, 1994.

Über die Lehre des Spinoza in Briefen an den Herrn Moses Mendelssohn. 2nd edn. Breslau, 1789. Translated in part by George di Giovanni in *Friedrich Heinrich Jacobi: The Main Philosophical Writings and the Novel* Allwill. Montreal and Kingston: McGill-Queen's University Press, 1994.

Werke: Gesamtausgabe. Edited by Klaus Hammacher and Walter Jaeschke. Stuttgart and Bad-Canstatt: Frommann-Holzboog, 1988–.

Kant, Immanuel. *Kritik der praktischen Vernunft* (1788). In *Kant's Gesammelte Schriften*. Vol. 5. Edited by the Royal Prussian Academy of the Sciences. Berlin: Reimer, 1913. Translated and edited by Mary Gregor as *Critique of Practical Reason*. Cambridge: Cambridge University Press, 1997.

Kritik der reinen Vernunft. 2nd edn (1787). In *Kant's Gesammelte Schriften*. Vol. 3. Edited by the Royal Prussian Academy of the Sciences. Berlin: Reimer, 1911. Translated and edited by Paul Guyer and Allen Wood as *Critique of Pure Reason*. Cambridge: Cambridge University Press, 1998.

Kritik der Urtheilskraft (1790). In *Kant's Gesammelte Schriften*. Vol. 5. Edited by the Royal Prussian Academy of the Sciences. Berlin: Reimer, 1913. Translated and edited by Paul Guyer and Eric Matthews as *Critique of the Power of Judgment*. Cambridge: Cambridge University Press, 2000.

Metaphysische Anfangsgründe der Naturwissenschaft (1786). In *Kant's Gesammelte Schriften*. Vol. 4. Edited by the Royal Prussian Academy of the Sciences. Berlin: Reimer, 1911. Translated by Michael Friedman as *Metaphysical Foundations of Natural Sciences*. In *Immanuel Kant: Theoretical Philosophy after*

1781. Edited by Henry Allison and Peter Heath. Cambridge: Cambridge University Press, 2002.

Kepler, Johannes. *Nova stereometria doliorum vinariorum* (1615). In *Gesammelte Werke*. Vol. 9, *Mathematische Schriften*. Edited by F. Hammer. Munich: Beck, 1960.

Klopstock, Friedrich Gottlieb. *Der Messias*. Leipzig, 1844.

Laertius, Diogenes. *Vitae philosophorum*. Edited by Miroslav Marcovich. 2 vols. Stuttgart: B. G. Teubner, 1999. Translated by R. D. Hicks in *Lives of Eminent Philosophers*. 2 vols. Cambridge, MA: Harvard University Press, 1965.

Lagrange, Joseph Louis. *Théorie des fonctions analytiques, contenant les principes du calcul différentiel, dégagés de toute considération d'infiniment petits, d'évanouissans, de limites et de fluxions, et réduits à l'analyse algébrique des quantités finies*. 3rd edn. Paris, 1847.

Traité de la résolution des équations numériques de tous les degrés, avec des notes sur plusieurs points de la théorie des équations algébriques. 3rd edn. Paris, 1826.

Lambert, Johann Heinrich. *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrtum und Schein* (1764). Vol. 1. Edited by Günter Schenk. Berlin: Akademie, 1990.

Leibniz, Gottfried Wilhelm. *Disputatio metaphysica de principio individui* (1663). In *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Series 2, Vol. 4. Edited by C. J. Gerhardt. Berlin, 1880.

Dissertatio de arte combinatoria (1666). In *Opera omnia*. Vol. 2: 1. Edited by Ludovici Dutens. Geneva, 1768.

Essais de Théodicée (1710). In *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Vol. 6. Edited by C. J. Gerhardt. Berlin, 1885. Translated by E. M. Huggard in *Theodicy: Essays on the Goodness of God, the Freedom of Man and the Origin of Evil*. La Salle, IL: Open Court, 1985.

Nouveaux essais sur l'entendement par l'auteur du système de l'harmonie préestablie (1704). In *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Vol. 5. Edited by C. J. Gerhardt. Hildesheim: Georg Olms, 1960. Translated and edited by Peter Remnant and Jonathan Bennett in *New Essays on Human Understanding*. Cambridge: Cambridge University Press, 1981.

"Ohne Überschrift, enthaltend die sogenannte Monadologie." In *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Vol. 6. Edited by C. J. Gerhardt. Hildesheim: Georg Olms, 1961. Translated by Daniel Garber and Roger Ariew as *The Principles of Philosophy, or, the Monadology* (1714). In *Philosophical Essays*. Indianapolis, IN: Hackett, 1989.

Opera omnia, nunc primum collecta. Edited by Ludovici Dutens. 6 vols. Geneva, 1768.

Principes de la nature et de la grace, fondés en raison (1714). In *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Vol. 6. Edited by C. J. Gerhardt. Hildesheim: Georg Olms, 1961. Translated by Daniel Garber and Roger Ariew as *The Principles of Nature and Grace, Based on Reason*. In *Philosophical Essays.* Indianapolis, IN: Hackett, 1989.

Malebranche, Nicolas. *Recherche de la vérité: Eclaircissements* (1674–5). In *Oeuvres de Malebranche*. Vol. 3. Edited by Geneviève Rodis-Lewis. Paris: Vrin, 1964. Translated and edited by Thomas M. Lennon in *The Search after Truth: Elucidations*. Cambridge: Cambridge University Press, 1997.

Mendelssohn, Moses. *Phädon: oder Über die Unsterblichkeit der Seele: In drei Gesprächen* (1767 and 1784). In *Gesammelte Werke, Jubiläumsausgabe: Schriften zur Philosophie und Ästhetik*. Vol. 3: 1. Berlin: Akademie, 1932.

Newton, Isaac. *Philosophiæ naturalis principia mathematica*. Amsterdam, 1714. Translated by I. Bernard Cohen and Anne Whitman in *The Principia: Mathematical Principles of Natural Philosophy*. Berkeley: University of California Press, 1999.

Plato. Sophista. In *Platonis et quae vel Platonis esse feruntur vel Platonica solent comitari . . .* Vol. 4. Edited by Immanuel Bekker. London, 1827. Translated by Nicholas P. White as *Sophist*. In *Complete Works*. Edited by John M. Cooper. Indianapolis, IN: Hackett, 1997.

Timaeus. In *Platonis et quae vel Platonis esse feruntur vel Platonica solent comitari . . .* Vol. 7. Edited by Immanuel Bekker. London, 1827. Translated by Donald J. Zeyl as *Timaeus*. In *Complete Works*. Edited by John M. Cooper. Indianapolis, IN: Hackett, 1997.

Plouquet, Gottfried. *Expositiones Philosophiæ Theoreticæ Logik* (1782). Edited and translated into German by Michael Franz. *Studien und Materialen zur Geschichte der Philosophie*. Hildesheim: Olms, 2006. Original Latin text included.

Reinhold, K. L. "Was ist das Denken, als Denken?" In *Beyträge zur leichtern Übersicht der Philosophie beym Anfange des 19. Jahrhunderts*, I. Hamburg: Perthes, 1801.

Ritter, Johann Wilhelm. *Das elektrische System der Körper: Ein Versuch*. Leipzig, 1805.

Schelling, F. W. J. *Darstellung meines Systems der Philosophie* (1801). In *Schellings Werke*. Vol. 3. Edited by Manfred Schröter. Munich: C. H. Beck, 1927.

Ideen zu einer Philosophie der Natur (1797). Reprinted in *Schellings Werke*. Ergänzungsband 1. Munich: Beck, 1956. Translated by E. H. Harris and Peter Heath as *Ideas for a Philosophy of Nature*. Cambridge: Cambridge University Press, 1988.

Schubert, Friedrich Theodor. *Theoretische Astronomie*. Vol. 3, *Physische Astronomie*. St. Petersburg, 1798.

Spehr, Friedrich Wilhelm. *Vollständiger Lehrbegriff der reinen Kombinationslehre*. Braunschweig, 1824.

Spinoza, Benedictus. *The Chief Works of Benedict of Spinoza*. Translated by R. H. M. Elwes. 2 vols. New York: Dover, 1951.

The Correspondence of Spinoza. Translated and edited by A. Wolf. New York: Russell & Russell, 1966.

Ethica. In *Opera*. Vol. 2. Edited by Carl Gebhardt. Heidelberg: Winter, 1925. Translated by Edwin Curley as *Ethics*. In *The Collected Writings of Spinoza*. Vol. 1. Princeton, NJ: Princeton University Press, 1985.

Opera. Edited by Carl Gebhardt. 4 vols. Heidelberg: Winter, 1925.

Wolff, Christian. *Anfangs-Gründe aller mathematischen Wissenschaften I*. Frankfurt and Leipzig, 1750. Reprinted in *Gesammelte Werke*. 1st series, Vol. 12. Hildesheim: Georg Olms, 1973.

Anfangs-Gründe aller mathematischen Wissenschaften II. Halle, 1757. Reprinted in *Gesammelte Werke*. 1st series, Vol. 13. Hildesheim: Georg Olms, 1973.

Elementa matheseos universæ. Halle and Magdeburg, 1742. Reprinted in *Gesammelte Werke*. 2nd series, vol. 29. Edited by J. E. Hofmann. Hildesheim: Georg Olms, 1968. Translated by John Hanna in *A Treatise of Algebra, with an Application of it to a Variety of Problems in Arithmetic, to Trigonometry, and Conic Sections. Three Preliminary Treatises*. London, 1739.

Philosophia prima, sive ontologia, methodo scientifica pertractata. 2nd edn. Frankfurt and Leipzig, 1736. Reprinted in *Gesammelte Werke*. 2nd series, Vol. 3. Edited by Jean Ecole. Hildesheim: Georg Olms, 1962.

Philosophia rationalis sive logica, methodo scientifica pertractata et ad usum scientiarum atque vitae aptata. Praemittitur discursus praeliminaris de philosophia in genere. Frankfurt, 1740. Reprinted in *Gesammelte Werke*. 2nd series, Vol. 1: 2. Edited by Jean Ecole. Hildesheim: Georg Olms, 1983.

Theologia naturalis methodo scientifica pertracta: pars posterior. Frankfurt and Leipzig, 1741. Reprinted in *Gesammelte Werke*. 2nd series, Vol. 8. Edited by Jean Ecole. Hildesheim: Georg Olms, 1981.

WORKS OF HEGEL CITED

Hegel, G. W. F. *Differenz des Fichte'schen und Schelling'schen System der Philosophie. Kritisches Journal der Philosophie* (1801). Reprinted in *Gesammelte Werke*. Vol. 4, *Jenaer Kritische Schriften*. Edited by Hartmut Buchner and Otto Pöggeler. Hamburg: Meiner, 1968. Translated by H. S. Harris and W. Cerf as *The Difference Between Fichte's and Schelling's System of Philosophy*. Albany: State University of New York Press, 1977.

"Verhältniß des Skepticismus zur Philosophie, Darstellung seiner verschiedenen Modificationen, und Vergleichung des neuesten mit dem alten." *Kritisches Journal der Philosophie* (1802). Reprinted in *Gesammelte Werke*. Vol. 4, *Jenaer Kritische Schriften*. Edited by Hartmut Buchner and Otto Pöggeler. Hamburg: Meiner, 1968. Translated with introductory studies by George di Giovanni and H. S. Harris as "On the Relationship of Skepticism to Philosophy, Exposition of its Different Modifications and Comparison of the Latest Form with the Ancient One." In *Between Kant and Hegel: Texts in the Development of Post-Kantian Idealism*. Revised edn. Indianapolis, IN: Hackett, 2000.

"Wie der gemeine Menschenverstand die Philosophie nehme – dargestellet an den Werken des Herrn Krug." *Kritisches Journal der Philosophie* (1802). Reprinted in *Gesammelte Werke*. Vol. 4, *Jenaer Kritische Schriften*. Edited by Hartmut Buchner and Otto Pöggeler. Hamburg: Meiner, 1968. Translated and edited by George di Giovanni and H. S. Harris as "How the Ordinary

Human Understanding Takes Philosophy (as displayed in the works of Mr. Krug)." In *Between Kant and Hegel: Texts in the Development of Post-Kantian Idealism*. Revised edn. Indianapolis, IN: Hackett, 2000.

G. W. F. Hegel: "System of Ethical Life" (1802/3) and "First Philosophy of Spirit" (1803/4): Part III of the System of Speculative Philosophy 1803/4. Edited and translated by H. S. Harris and T. M. Knox. Albany: State University of New York Press, 1979. Critical German Text: *Gesammelte Werke*. Vol. 5, *Schriften und Entwürfe (1799–1808)*. Edited by T. Ebert, M. Baum, and K. R. Meist. Hamburg: Meiner, 1998.

Phänomenologie des Geistes. Bamberg and Würzburg, 1807. Reprinted in *Gesammelte Werke*. Vol. 9. Edited by Wolfgang Bonsiepen and Reinhard Heede. Hamburg: Meiner, 1980. Translated by A. V. Miller as *Hegel's Phenomenology of Spirit*. Oxford: Oxford University Press, 1977.

Wissenschaft der Logik. Vol. 1, *Die objektive Logik*. Nürnberg, 1812. Reprinted in *Gesammelte Werke*. Vol. 11, *Wissenschaft der Logik, Erster Band: Die objektive Logik (1812/1813)*. Edited by Friedrich Hogemann and Walter Jaeschke. Hamburg: Meiner, 1978.

Wissenschaft der Logik. Vol. 1, *Die objektive Logik*. Book 2, "*Die Lehre vom Wesen*." Nürnberg, 1813. Reprinted in *Gesammelte Werke*. Vol. 11, *Wissenschaft der Logik, Erster Band: Die objektive Logik (1812/1813)*. Edited by Friedrich Hogemann and Walter Jaeschke. Hamburg: Meiner, 1978.

Wissenschaft der Logik oder die Lehre vom Begriff. Nürnberg, 1816. Reprinted in *Gesammelte Werke*. Vol. 12, *Wissenschaft der Logik, Zweiter Band: Die subjektive Logik (1816)*. Edited by Friedrich Hogemann and Walter Jaeschke. Hamburg: Meiner, 1981.

Wissenschaft der Logik. 2nd edn. Edited by Leopold von Henning. 2 vols. Berlin: Duncker and Humblot, 1841.

Encyclopedia Logic, as Hegel's Logic or The Logic of Hegel. Translated by W. Wallace. London: Oxford University Press, 1873. Reprint, 1963.

Encyclopädie der philosophischen Wissenschaften im Grundrisse: Zum Gebrauch seiner Vorlesungen. 1st edn. Heidelberg, 1817. Reprinted in *Gesammelte Werke*. Vol. 13. Edited by Wolfgang Bonsiepen and Klaus Grotsch. Hamburg: Meiner, 2000.

Encyclopädie der philosophischen Wissenschaften im Grundrisse: Zum Gebrauch seiner Vorlesungen. 3rd edn. Heidelberg, 1830. Reprinted in *Gesammelte Werke*. Vol. 20. Edited by Wolfgang Bonsiepen and Hans-Christian Lucas. Hamburg: Meiner, 1992.

Wissenschaft der Logik, erster Teil, Die objektive Logik. Vol. 1, *Die Lehre vom Sein*. Stuttgart and Tübingen, 1832. Reprinted in *Gesammelte Werke*. Vol. 21, *Wissenschaft der Logik, Teil I: Die objective Logik; Band I: Die Lehre vom Sein (1832)*. Edited by Friedrich Hogemann and Walter Jaeschke. Hamburg: Meiner, 1985.

Georg Wilhelm Friedrich Hegel's Werke: Vollständige Ausgabe durch einen Verein von Freunden des Verewigten. Vols. 3–5, *Wissenschaft der Logic*. Edited by Leopold von Henning. Berlin: Duncker und Humblot, 1833.

"Hegels ursprüngliches System 1798–1806: Aus Hegels Nachlass." *Literarhistorisches Taschenbuch*. Edited by Robert Prutz. Leipzig, ii (1844).

The Logic of Hegel, Translated from the Encyclopaedia of the Philosophical Sciences. Translated by William Wallace. Oxford: Oxford University Press, 1873. 2nd edn, 1892.

Hegel's Logic, Being Part One of the Encyclopedia of the Philosophical Sciences (1830). Translated by William Wallace, with a Foreword by J. N. Findlay. Oxford: Clarendon Press, 1975.

Theologische Jugendschriften. Edited by Hermann Nohl. Tübingen: Mohr, 1907. Reprint, Frankfurt am Main: Minerva, 1966.

Hegel's Doctrine of Formal Logic, Being a Translation of the First Section of the Subjective Logic. Translated by H. S. Macran. Oxford: Clarendon, 1912.

G. W. F. Hegel: Hegels erstes System. Edited by H. Eherenberg and H. Link. Heidelberg, 1915.

Jenenser Logik, Metaphysik und Naturphilosophie. Edited by Georg Lasson. Leipzig: Meiner, 1923.

Hegel's Logic of World and Idea, Being a Translation of the Second and Third Parts of the Subjective Logic. Translated by H. S. Macran. Oxford: Clarendon Press, 1929.

Hegel's Science of Logic. Translated by W. H. Johnston and L. G. Struthers. 2 vols. London: Allen & Unwin; New York: Macmillan, 1929.

Jenenser Realphilosophie I. Edited by Johannes Hoffmeister. Leipzig: Meiner, 1932.

Wissenschaft der Logik. 2nd edn. Edited by Georg Lasson. Leipzig: Meiner, 1932–1934.

Hegel's Science of Logic. Translated by A. V. Miller. London: Allen & Unwin; New York: Humanities Press, 1969.

Science de la logique. Translated by S. Jankélévich after the Lasson edition. Paris: Aubier, 1969.

Gesammelte Werke. Vol. 7, *Jenaer Systementwürfe II, Logik, Metaphysik, Naturphilosophie (1804/05)*. Edited by Rolf-Peter Horstmann and Johann Heinrich Trede. Hamburg: Meiner, 1982. Translation of the Logic and Metaphysics edited by John Burbidge and George di Giovanni as *The Jena System 1804–5: Logic and Metaphysics*. Kingston and Montreal: McGill-Queen's University Press, 1986.

Encyclopedia Logic: Part 1 of the "Encyclopedia of the Philosophical Sciences" with the Zusätze. Translated by T. F. Geraets, W. A. Suchting, and H. S. Harris. Indianapolis, IN: Hackett, 1991.

Vorlesungen, Ausgewählte Nachschriften und Manuskripten. Vol. 11, *Vorlesungen über Logik und Metaphysik*. Edited by Karen Gloy. Hamburg: Meiner, 1992.

G. W. F. Hegel: Scienza della logica, Vols. 1 and 2. Translated by Arturo Moni. 1924–25. Revised by Claudio Cesa. Roma-Bari: Laterza, 2001.

Vorlesungen, Ausgewählte Nachschriften und Manuskripten. Vol. 10, *Vorlesungen über die Logik*. Edited by Udo Rameil and H.-Christian Lucas. Hamburg: Meiner, 2001.

Gesammelte Werke. Vol. 8, *Jenaer Systementwürfe III*. Edited by Rolf-Peter Horstmann. Hamburg: Meiner, 1976. Translated in part by Leo Rauch as *Hegel and the Human Spirit: A Translation of the Jena Lectures on the Philosophy of Spirit (1805–6) with Commentary*. Detroit: Wayne State University Press, 1983.

WORKS CITED BY THE EDITOR AND SELECTED READINGS

Baillie, James Black. *The Origin and Significance of Hegel's Logic*. London: Macmillan, 1901. Reprint, New York: Garland, 1984.

Balaban, Oded. "Circularity of Thought in Hegel's Logic." *Review of Metaphysics*, 44.1 (September 1990): 95–109.

Baptist, Gabriella. *Il problema della modalità nelle logiche di Hegel*. Genoa: Pantograf, 1993.

Beiser, Frederick. *Hegel*. New York: Routledge, 2005.

Bencivenga, Ermanno. *Hegel's Dialectical Logic*. New York: Oxford University Press, 2000.

Berto, Francesco. "Modus tollens: Kant, Hegel e la critica della nozione logica di sostanza." *Giornale di metafisica*, 25.2 (May–August 2003): 287–304.

Biard, J., D. Buvet, J. F. Kervegan, J. F. Kling, A. Lacmix, A. Lecrivain, and M. Slubicki. *Introduction à la lecture de la Science de la Logique de Hegel*. 3 vols. Paris: Aubier-Montaigne, 1981–1987.

Bole, T. "Contradiction in Hegel's Science of Logic." *Review of Metaphysics*, 40 (March 1987): 515–534.

"The Dialectic of Hegel's Logic as the Logic of Ontology." *Hegel-Jahrbuch*, 19.4 (1975): 152–159.

"The Success of the Project of Hegel's Science of Logic." *Southwest Philosophy Review: The Journal of The Southwestern Philosophical Society*, 18.1 (January 2002): 155–163.

"Taking Hegel's Logic Seriously." *Southwest Philosophy Review: The Journal of The Southwestern Philosophical Society*, 9.1 (January 1993): 51–61.

Bormann, Marco. "On the Deconstruction of Hegel's Logic." *Prima Philosophia*, 13.4 (October–December 2000): 333–340.

Brandom, Robert. "The Structure of Desire and Recognition: Self-Consciousness and Self-Constitution." In *Von der Logik zur Sprache*. Stuttgarter Hegel-Kongress 2005. Edited by R. Bubner and G. Hindrichs. Stuttgart: Klett-Cotta, 2007.

Tales of the Mighty Dead. Cambridge, MA: Harvard University Press, 2002.

Bubner, Rüdiger. "Zur Struktur dialektischer Logik." In *Hegel-Jahrbuch 1974*. Edited by Wilhelm R. Beyer. Cologne: Pahl-Rugenstein, 1974.

Burbidge, John W. "The First Chapter of Hegel's Larger Logic." *The Owl of Minerva*, 21.2 (Spring 1990): 177–183.

Hegel on Logic and Religion: The Reasonableness of Christianity. Albany, NY: State University of New York Press, 1992.
"Hegel's Conception of Logic." In *The Cambridge Companion to Hegel*. Edited by Frederick C. Beiser. Cambridge: Cambridge University Press, 1993.
"Hegel's Logic." In *Handbook of the History of Logic*. Vol. 3, *The Rise of Modern Logic: From Leibniz to Frege*. Edited by Dov. M. Gabbay and John Woods. Amsterdam: Elsevier/North Holland, 2004.
On Hegel's Logic: Fragments of a Commentary. Atlantic Highlands, NJ: Humanities, 1981.
The Logic of Hegel's "Logic": An Introduction. Peterborough: Broadview, 2006.
Review of *Gesammelte Werke*. Vol. 11, *Wissenschaft der Logik, Erster Band: Die objektive Logik (1812/13)*, by G. W. F. Hegel. *The Owl of Minerva*, 10.4 (1979): 5–7.
Burkhardt, Bernd. *Hegels "Wissenschaft der Logik" im Spannungsfeld der Kritik*. New York: Olms, 1993.
Butler, Clark. *Hegel's Logic: Between Dialectic and History*. Evanston, IL: Northwestern University Press, 1996.
Carlson, David Gray. *A Commentary to Hegel's "Science of Logic."* Basingstoke and New York: Palgrave Macmillan, 2007.
"Hegel's Theory of Measure." *Cardozo Law Review*, 25.1 (2003): 129–213.
"Hegel's Theory of Quantity." *Cardozo Law Review*, 23.6 (2002): 2027–2155.
ed. *Hegel's Theory of the Subject*. Basingstoke and New York: Palgrave Macmillan, 2005.
Cave, George P. "The Dialectic of Becoming in Hegel's Logic." *The Owl of Minerva*, 16.2 (Spring 1985): 147–160.
Centrone, Stefania. "Infinito matematico e soggettività: Notazioni sulla sezione quantità della Scienza della Logica di Hegel." *Giornale Critico della Filosofia Italiana*, 22.3 (September–December 2002): 430–448.
Cirulli, F. *Hegel's Critique of Essence: A Reading of the Wesenslogik*. New York: Routledge, 2006.
Cutrofello, Andrew. "Hegel's *Science of Logic* and Idea of Truth." *Idealistic Studies: An International Philosophical Journal*, 13.1 (1983): 33–49.
Damerow, P. and W. Lefèvre. "Die wissenschaftliche Problemlage für Hegels 'Logik.'" In *Hegel-Jahrbuch 1979*. Edited by W. R. Beyer. Cologne: Pahl-Rugenstein, 1980.
De Boer, Karin. "The Dissolving Force of the Concept: Hegel's Ontological Logic." *Review of Metaphysics*, 57.4 (June 2004): 787–822.
Deligiorgi, Katerina. "Kant, Hegel, and the Bounds of Thought." *Bulletin of the Hegel Society of Great Britain*, 45–46 (2002): 56–71.
De Vos, Ludovicus. *Hegels Wissenschaft der Logik: Die absolute Idee. Einleitung und Kommentar*. Bonn: Bouvier, 1983.
De Vries, W. A. "Hegel's Logic and Philosophy of Mind." In *Routledge History of Philosophy*. Vol. 6, *The Age of German Idealism*. Edited by R. C. Solomon and K. M. Higgins. London: Routledge, 1993.

Di Carlo, Leonardo. "Dal concetto alla natura nella Scienza della logica di Hegel." *Teoria: Rivista di Filosofia*, 24.2 (2004): 79–91.

Di Giovanni, George. "The Category of Contingency in the Hegelian Logic" (1980). Reprinted in *Selected Essays on G. W. F. Hegel*. Edited by L. Stepelevich. New York: Humanities Press, 1992.

ed. *Essays on Hegel's Logic*. Albany: State University of New York Press, 1990.

Freedom and Religion in Kant and His Immediate Successors: The Vocation of Humankind, 1774–1800. Cambridge: Cambridge University Press, 2005.

"Hegel's Anti-Spinozism: The Transition to Subjective Logic and the End of Classical Metaphysics." *The Cardozo Public Law, Policy, and Ethics Journal*, 3 (2005): 45–60.

"Reflection and Contradiction: A Commentary on Some Passages of Hegel's Science of Logic" (1973). Reprinted in *G. W. F. Hegel: Critical Assessments*. Vol. 3. Edited by Robert Stern. London: Routledge, 1993.

"Sacramentalizing the World: On Fichte's Wissenschaftslehre of 1810." In *Grund- und Methodenfragen in Fichtes Spätwerk*. Fichte-Studien 31. Edited by Günter Zöller and Hans Georg von Mainz. Amsterdam and New York: Rodopi, 2007.

Doz, André. *La logique de Hegel et les problèmes traditionnels de l'ontologie*. Paris: Vrin, 1987.

"L'entrée dans la Logique de Hegel." *Bulletin de la societé française de philosophie*, 89.1 (January–March 1995): 1–27.

Dubarle, Dominique and André Doz. *Logique et dialectique*. Paris: Larousse, 1972.

Düsing, Klaus. *Das Problem der Subjektivität in Hegels Logik*. Bonn: Bouvier, 1976.

Eley, Lothar. *Hegels Wissenschaft der Logik. Leitfaden und Kommentar*. Munich: Wilhelm Fink, 1976.

Erdmann, J. E. *Grundriß der Logik und der Metaphysik*. 4th edn. Halle: Schmid, 1864. Translated by B. C. Burt, as *Outlines of Logic and Metaphysics*. London: Swan Sonnenschein, 1896.

Falk, Hans-Peter. *Das Wissen in Hegels "Wissenschaft der Logik."* Symposium no. 83. Freiburg: Alber, 1983.

Falkenburg, Brigitte. "How to Save the Phenomena." In *Hegel and the Philosophy of Nature*. Edited by Stephen Houlgate. Albany, NY: State University of New York Press, 1998.

Ferrara, Vincent J. "Hegel's Logic: A Dialectical Substantiation of Anselm's Ontological Argument." *Analecta Anselmiana*, 4.1 (1975): 261–274.

Ferrer, Diogo Falcão. "La function systématique de l'idée de la vie dans la 'Science de la logique' de Hegel." In *Das Leben Denken, Erster Teil (Hegel-Jahrbuch 2006)*. Edited by Andreas Arndt. Berlin: Akademie, 2006.

Ferrini, Cinzia. *Dai primi hegeliani a Hegel*. Naples: Città del Sole, 2003.

"Logica e filosofia della natura nella dottrina dell'essere hegeliana I." *Rivista di storia della filosofia*, 4 (1991): 701–735.

"Logica e filosofia della natura nella dottrina dell'essere hegeliana II." *Rivista di storia della filosofia*, 1 (1992): 104–124.

"On the Relation between 'Mode' and 'Measure' in Hegel's *Science of Logic*: Some Introductory Remarks." *The Owl of Minerva*, 20.1 (Fall 1988): 21–49.

Fichera, Giuseppe. *Il problema del cominciamento logico e la categoria del divenire in Hegel e nei suoi critici*. Catania: Istituto universitario di magistero, 1956.

Fichte, J. G. *Die Bestimmung des Menschen, dargestellt von Johann Gottlieb Fichte*. Berlin: Voss, 1800. Translated by Roderick M. Chisholm as *The Vocation of Man*. New York: Bobbs-Merrill, 1956.

"Versuch einer neuen Darstellung der Wissenschaftslehre: Einleitung." In *Gesamtausgabe der bayerischen Akademie der Wissenschaften*. Series 1, Vol. 4, *Werke 1797–98*. Edited by Reinhard Lauth and Hans Gliwitzky. Stuttgart and Bad-Canstatt: Frommann-Holzboog, 1970. Translated and edited by Daniel Breazeale in *An Attempt at a New Presentation of the Wissenschaftslehre* (1797/98): "[First] Introduction to the *Wissenschaftslehre*." In *Introductions to the Wissenschaftslehre and Other Writings*. Indianapolis, IN: Hackett, 1994.

"Versuch einer neuen Darstellung der Wissenschaftslehre: Zweite Einleitung in die Wissenschaftslehre." In *Gesamtausgabe der bayerischen Akademie der Wissenschaften*. Series 1, Vol. 4, *Werke 1797–98*. Edited by Reinhard Lauth and Hans Gliwitzky. Stuttgart and Bad-Canstatt: Frommann-Holzboog, 1970. Translated and edited by Daniel Breazeale in *An Attempt at a New Presentation of the Wissenschaftslehre* (1797/98): "Second Introduction to the *Wissenschaftslehre*." In *Introductions to the Wissenschaftslehre and Other Writings*. Indianapolis, IN: Hackett, 1994.

Findlay, J. N. *Hegel: A Re-Examination*. New York: MacMillan, 1958; New York: Humanities Press, 1964.

Fink-Eitel, H. "Hegels phänomenologische Erkenntnistheorie als Begründung dialektischer Logik." *Philosophisches Jahrbuch*, 85.2 (1978): 242–258.

Flach, Werner. "Zum 'Vorbegriff' der kleinen Logik Hegels." In *Der Idealismus und seine Gegenwart. Festschrift für Werner Marx zum 65. Geburtstag*. Edited by Ute Guzzoni, Bernhard Rang, and Ludwig Siep. Hamburg: Meiner, 1976.

Fleischhacker, L. "Hegel on Mathematics and Experimental Science." In *Hegel and Newtonianism*. Edited by Michael John Petry. Dordrecht: Kluwer, 1993.

Fleischmann, Eugène. *La science universelle ou la logique de Hegel*. Paris: Plon, 1968.

Forster, Michael. "Hegel's Dialectical Method." In *The Cambridge Companion to Hegel*. Edited by Frederick C. Beiser. New York: Cambridge University Press, 1993.

Friedrich, Horst. *Hegel's "Wissenschaft der Logik": Ein Marxistischer Kommentar*. 2 vols. Berlin: Karl Dietz, 2000, 2006.

Fulda, Hans Friedrich. *Das Problem einer Einleitung in Hegels Wissenschaft der Logik*. Frankfurt am Main: Klostermann, 1965.

"Unzulängliche Bemerkungen zur Dialektik." In *Seminar: Dialektik in der Philosophie Hegels*. Edited by Rolf-Peter Horstmann. Frankfurt am Main: Suhrkamp, 1978.

Fulda, Hans Friedrich, Rolf-Peter Horstmann, and Michael Theunissen. *Kritische Darstellung der Metaphysik: Eine Diskussion über Hegels Logik*. Frankfurt: Suhrkamp, 1980.

Gadamer, Hans Georg. "The Idea of Hegel's Logic." In *Hegel's Dialectic: Five Hermeneutical Studies*. Translated by P. Christopher Smith. New Haven and London: Yale University Press, 1976.

Gaskins, Richard H. "The Structure of Self-Commentary in Hegel's Dialectical Logic." *International Philosophical Quarterly*, 30 (December 1990): 403–417.

Gauthier, Yvon."Logique hegelienne et formalisation." *Canadian Philosophical Review*, 6 (September 1967): 151–165.

Genovesi, Antonio. *Elementa artis logico-criticæ*, Liber V. Venice, 1749.

Gli elementi dell'arte logico-critica, 2nd edn. Venice, 1783.

Geraets, Théodore F. *La logica di Hegel tra religione e storia*. Milan: Guerini e associati, 1996.

Graeser, Andreas. "Bemerkungen zur Beschreibung des Anfangenden in Hegels Logik." *Freiburger Zeitschrift für Philosophie und Theologie*, 32 (1985): 439–454.

Gray, J. G. "Hegel's Logic: The Philosophy of the Concrete." *Virginia Quarterly*, 47.2 (1971): 175–189.

Günther, Gotthard. *Grundzüge einer neuen Theorie des Denkens in Hegels Logik*. 2nd edn. Hamburg: Meiner, 1978.

Gupta, Jay A. "Hegel on Logic, Determinacy, and Cognition." *Philosophical Forum*, 35.1 (Spring 2004): 81–96.

Guzzoni, Ute. *Werden zu sich: Eine Untersuchung zu Hegels "Wissenschaft der Logik."* Freiburg i. Br: Alber, 1978.

Haag, Karl Heinz. *Philosophischer Idealismus: Untersuchungen zur Hegelschen Dialektik mit Beispielen aus der "Wissenschaft der Logik."* Frankfurt: Europaische Verlagsanstalt, 1967.

Haas, Andrew. *Hegel and the Problem of Multiplicity*. Evanston, IL: Northwestern University Press, 2000.

Hackenesch, Christa. *Die Logik der Andersheit: Eine Untersuchung zu Hegels Begriff der Reflexion*. Frankfurt: Athenäum, 1987.

Hahn, S. S. *Contradiction in Motion: Hegel's Organic Concept of Life and Value*. Ithaca, NY: Cornell University Press, 2007.

Halper, Edward. "Self-Relation in Hegel's Science of Logic." *Philosophy Research Archives*, 7 (1981): 89–133.

Hanna, Robert. "From an Ontological Point of View: Hegel's Critique of the Common Logic." *Review of Metaphysics*, 40 (December 1986): 305–338.

Harris, Errol E. *An Interpretation of the Logic of Hegel*. New York: University Press of America, 1983.

Harris, H. S. "Hail and Farewell to Hegel: The Phenomenology and the Logic." *The Owl of Minerva*, 25.2 (Spring 1994): 163–171.

Hegel's Development. Vol. 2, *Night Thoughts: Jena 1801–1806*. Oxford: Clarendon Press, 1983.

"Hegel's Jena Logic and Metaphysics." *The Owl of Minerva*, 18.2 (Spring 1987): 209–218.

Harris, W. T. *Hegel's Doctrine of Reflection: Being a Paraphrase and a Commentary Interpolated into the Text of the Second Volume of Hegel's Larger Logic, Treating of "Essence."* New York: D. Appleton, 1881.

Hegel's Logic: A Book on the Genesis of the Categories of the Mind. Chicago, 1890. Reprinted as *Hegel's Logic: The Philosophy of Hegel*. New York: Garland, 1984.

Hartnack, Justus. *An Introduction to Hegel's Logic*. Translated by Kenneth R. Westphal and Lars Aagaard-Mogensen. Indianapolis: Hackett, 1998.

Hasselberg, Erwin and Frank Radtke, eds. *Hegels Wissenschaft der Logik: Eine internationale Bibliographie ihrer Rezeption im XX Jahrhundert*. Vienna: Passagen, 1993.

Henrich, Dieter. "Anfang und Methode der Logik." *Hegelstudien*, 1 (1964): 19–35.

Hegel im Kontext. Frankfurt am Main: Surhkamp, 1971.

Hegels Wissenschaft der Logik: Formation und Rekonstruktion. Stuttgart: Klett-Cotta, 1986.

ed. *Die Wissenschaft der Logik und die Logik der Reflexion*. Hegel-Tage Chantilly 1971. Bonn: Bouvier, 1978.

Hibben, John G. *Hegel's Logic: An Essay in Interpretation*. New York: Scribner and Sons, 1902. Reprint, New York: Garland, 1984; Hibben Press, 2007.

Hoffmeyer, John. *The Advent of Freedom: The Presence of the Future in Hegel's "Logic."* London: Associated University Press, 1994.

Hogemann, F. "L'idée absolue dans la science de la logique de Hegel." In *Hegel: The Absolute Spirit*. Edited by Theodore F. Geraets. Ottawa: University of Ottawa Press, 1984.

"Die Idee des Guten in Hegels Wissenschaft der Logik." *Hegel-Studien*, 29 (1994): 79–102.

Holz, Harald. "Anfang, Identität und Widerspruch: Strukturen von Hegels *Wissenschaft der Logik*, gezeigt an dem Abschnitt: 'Womit der Anfang der Wissenschaft gemacht werden muss' sowie der 'Logik des Seins.'" *Tijdschrift voor Filosofie*, 36 (1974): 707–761.

Horstmann, Rolf-Peter. "Hegel über Unendlichkeit, Substanz, Subjekt: Eine Fallstudie zur Rolle der Logik in Hegels System." In *Internationales Jahrbuch des Deutschen Idealismus/International Yearbook of German Idealism*. Vol. 1, *Konzepte der Rationalität/Concepts of Rationality*. Edited by Karl Ameriks. Berlin: De Gruyter, 2003.

Hösle, V. *Hegels System: Der Idealismus der Subjektivität und des Problems der Intersubjektivität*. Vol. 1, *Systementwicklung und Logik*. Hamburg: Meiner, 1987.

Houlgate, Stephen. *An Introduction to Hegel: Freedom, Truth, and History*. 2nd edn. London: Routledge, 2005.

"Hegel's Critique of Foundationalism in the 'Doctrine of Essence.'" In *German Philosophy Since Kant*. Edited by Anthony O'Hear. Cambridge: Cambridge University Press, 1999.

"Logic and Nature in Hegel's Philosophy: A Response to John Burbidge." *The Owl of Minerva*, 34.1 (2002–2003): 107–125.

"Necessity and Contingency in Hegel's Science of Logic." *The Owl of Minerva*, 27 (1995): 37–49.

The Opening of Hegel's Logic: From Being to Infinity. West Lafayette, IN: Purdue, 2006.

"Substance, Causality, and the Question of Method in Hegel's Science of Logic." In *The Reception of Kant's Critical Philosophy: Fichte, Schelling, and Hegel*. Edited by Sally Sedgwick. Cambridge: Cambridge University Press, 2000.

Hyppolite, Jean. "Essai sur la logique de Hegel." *Revue internationale de philosophie*, 6.19 (1962): 35–49. Reprinted in *Figures de la pensée philosophique: Ecrits (1931–1968)*. Paris: Presses Universitaires de France, 1971.

Logique et existence: essai sur la logique de Hegel. Paris: Presses Universitaires de France, 1961.

Iber, Christian. *Metaphysik absoluter Relationalität: Eine Studie zu den beiden ersten Kapiteln von Hegels Wesenslogik*. Berlin: de Gruyter, 1990.

Inwood, M. J. *Hegel*. London: Routledge & Kegan Paul, 1983.

Insole, Christopher J. "Informed Tolerance." Review of *A Secular Age*, by Charles Taylor. *The Times Literary Supplement*, February 1, 2008, 5470: 5.

Jarczyk, Gwendoline. "Une approche de la vérité logique chez Hegel." *Archives de philosophie*, 44 (April–June 1981): 239–247.

"Subjet/objet dans la logique de l'essence de Hegel." *Aquinas: Rivista internazionale di filosofia*, 24 (May–December 1981): 337–352.

Système et liberté dans la logique de Hegel. Paris: Editions Aubier-Montague, 1980.

Johannes a sancto Thoma. *Cursus Philosophicus*. Edited by B. Reiser. Turin: Marietti, 1930.

The Material Logic of John of St. Thomas. Translated by Y. Simon, J. J. Glanville, and G. D. Hollenhorst. Chicago: Chicago University Press, 1955.

Johnson, Paul Owen. *The Critique of Thought: A Re-examination of Hegel's Science of Logic*. Brookfield: Gower, 1988.

Kemper, Peter. *Dialektik und Darstellung: Eine Untersuchung zur spekulativen Methode in Hegels "Wissenschaft der Logik."* Frankfurt: Fischer, 1980.

Kierkegaard, Søren. *Concluding Unscientific Postscript*. Vol. 1. Edited and translated by H. V. Hong and E. H. Hong. Princeton, NJ: Princeton University Press, 1992.

Kimmerle, Heinz. "Die allgemeine Struktur der dialektischen Methode." *Zeitschrift für philosophische Forschung*, 33 (April–June 1979): 184–209.

Das Problem der Abgeschlossenheit des Denkens. Hegel-Studien, Beiheft 8. Bonn: Bouvier, 1970.

Kirkland, Frank M. "Hegel's Critique of Psychologism." In *Phenomenology: East and West: Essays in Honor of J. N. Mohanty*. Edited by Frank M. Kirkland. Dordrecht: Kluwer, 1993.

Koch, Anton Friedrich. "Die Selbstbeziehung der Negation in Hegels Logik." *Zeitschrift für philosophische Forschung*, 53.1 (January–March 1999): 1–29.

Kreines, James. "Hegel's Critique of Pure Mechanism and the Philosophical Appeal of the Logic Project." *European Journal of Philosophy*, 12.1 (April 2004): 38–74.

Lakebrink, Bernhard. "Aus Hegels Logik: Sein und Existenz." In *Der Idealismus und seine Gegenwart. Festschrift für Werner Marx zum 65. Geburtstag*. Edited by Ute Guzzoni, Bernhard Rang and Ludwig Siep. Hamburg: Meiner, 1976.

Kommentar zur Hegels "Logik" in seiner "Encyclopädie" von 1830. 2 vols. Freiburg: Karl Alber, 1979, 1985.

Lamb, David. "Teleology: Kant and Hegel." In *Hegel's Critique of Kant*. Edited by Stephen Priest. Oxford: Oxford University Press, 1987.

Lau, Chong-Fuk. "Voraussetzungs- und Bestimmungslosigkeit: Bemerkungen zum Problem des Anfangs in Hegels 'Wissenschaft der Logik.'" *Perspektiven der Philosophie: Neues Jahrbuch*, 26 (2000): 287–323.

Léonard, André. *Commentaire littéral de la logique de Hegel*. Paris: J. Vrin, 1974.

Longuenesse, Béatrice. "Actuality in Hegel's Logic." *Graduate Faculty Philosophy Journal*, 13.1 (1988): 115–124.

Hegel's Critique of Metaphysics. Translated by Nicole J. Simek. Cambridge: Cambridge University Press, 2007.

Lukács, George. "Die Frage der Besonderheit in der klassischen deutschen Philosophie: Das Problem von Allgemeinheit, Besonderheit und Einzelheit in der Logik und Kategorienlehre bei Kant, Schelling und Hegel." *Deutsche Zeitschrift für Philosophie*, 2.4 (1954): 764–807.

Macran, H. S. *Hegel's Logic of World and Idea*. Oxford: Clarendon Press, 1929.

Marcuse, Herbert. *Hegel's Ontology and the Theory of Historicity*. Translated by Seyla Benhabib. Cambridge, MA: MIT Press, 1987.

Marx, Wolfgang. *Hegels Theorie logischer Vermittlung: Kritik der dialektischen Begriffskonstruktion in der "Wissenschaft der Logik."* Stuttgart: Fromann Holzboog, 1972.

Massolo, Arturo. *Logica hegeliana e filosofia contemporanea*. Florence: Giunti, 1967.

Ricerche sulla logice hegeliana ed altri saggi. Florence: Marzocco, 1950.

McTaggart, John McTaggart Ellis. *A Commentary on Hegel's Logic*. Cambridge: Cambridge University Press, 1910.

Studies in Hegelian Cosmology. Cambridge: Cambridge University Press, 1918.

Studies in the Hegelian Dialectic. 2nd edn. Cambridge: Cambridge University Press, 1922.

Meist, Kurt Reiner. "'Sich vollbringende Skeptizismus': G. E. Schulzes Replik auf Hegel und Schelling." In *Transzendentalphilosophie und Spekulation: Der Streit um die Gestalt einer ersten Philosophie (1799–1807)*. Edited by Walter Jaeschke. Hamburg: Meiner, 1993.

Merker, Nicolao. *Le origini della logica hegeliana: Hegel a Jena*. Milan: Feltrinelli, 1961.

Michelet, C. L. "The Dialectic and the Principle of Contradiction (1871)." In *G. W. F. Hegel: Critical Assessments*. Vol. 1, *Nineteenth Century Readings*. Translated by Louis Soldan. Edited by Robert Stern. London: Routledge, 1993.

Moretto, Antonio. *Filosofia della matematica e della meccanica nel sistema hegeliano*. Padua: Il Poligrafo, 2004.

Hegel e la "Matematica dell'infinito." Trento: Verifiche, 1984.

Questioni di filosofia della matematica nella "Scienza della Logica" di Hegel. Trento: Verifiche, 1988.

"Sul problema della considerazione matematica dell'infinito e del continuo in Aristotele e Hegel." In *Hegel e Aristotele*. Edited by A. Ferrarin. Cagliari: Edizioni AV, 1997.

Müller, Olaf and Klaus Hartmann. *Hegels Logik*. Hawthorne: de Gruyter, 1999.

Mure, G. R. G. *An Introduction to Hegel*. Oxford: Clarendon Press, 1940.

A Study of Hegel's Logic. Oxford: Clarendon Press, 1950.

Noël, G. *La logique de Hegel*. Paris: Vrin, 1933.

Nuzzo, Angelica. "The Idea of 'Method' in Hegel's *Science of Logic* – A Method for Finite Thinking and Absolute Reason." *Bulletin of the Hegel Society of Great Britain*, 39–40 (1999): 1–17.

Logica e sistema: Sull' idea hegeliana di filosofia. Genoa: Pantograf, 1992.

Paimann, Rebecca. "Anmerkungen zum Verhältnis von Glauben und Wissen in Bezug auf den Anfang der Hegelschen 'Wissenschaft der Logik.'" In *Glauben und Wissen, Zweiter Teil (Hegel-Jahrbuch 2004)*. Edited by Andreas Arndt *et al*. Berlin: Akademie, 2004.

Papi, Fulvio. "Sull'inizio nella Scienza della logica di Hegel: Filosofia come inizio e come progetto." *Paradigmi*, 19 (2001): 23–34.

Paterson, A. L. T. "Self-reference and the Natural Numbers as the Logic of Dasein." *Hegel-Studien*, 32 (1997): 93–121.

Pinkard, Terry. *Hegel's Dialectic: The Explanation of Possibility*. Philadelphia: Temple, 1988.

"Hegel's Idealism and Hegel's Logic." *Zeitschrift für philosophische Forschung*, 33 (April–June 1979): 210–226.

"The Logic of Hegel's Logic." *Journal of the History of Philosophy*, 17 (October 1979): 417–435.

"The Successor to Metaphysics: Absolute Idea and Absolute Spirit." *Monist*, 74.3 (July 1991) 295–328.

Pippin, Robert B. "Hegel and Category Theory." *Review of Metaphysics*, 43.4 (June 1990): 839–848.

Hegel's Idealism: The Satisfaction of Self-Consciousness. New York: Cambridge University Press, 1989.

"Hegel's Metaphysics and the Problem of Contradiction." *Journal of the History of Philosophy*, 16.3 (1978): 301–312.

Pöggeler, Otto. "Fragmente aus einer Hegelschen Logik mit einem Nachwort zur Entwicklungsgeschichte von Hegels Logik." *Hegel-Studien*, 2 (1963): 19–70.

Rinaldi, Giacomo. "Die Aktualität von Hegels Logik." *Jahrbuch für Hegelforschung*, 2 (1996): 27–54.

A History and Interpretation of Hegel's Logic. Lewiston, NY: Edwin Mellen Press, 1992.

"Le prime categorie della logica hegeliana e il problema dell'origine della dialettica." *Annali della Facoltà di lettere e filosofia, Università di Napoli*, 20 (1977–1978): 305–306.

Rosen, Stanley. *G. W. F. Hegel: An Introduction to the Science of Wisdom*. New Haven, CT: Yale University Press, 1974.

Rosenkranz, Karl. *Georg Wilhelm Friedrich Hegel's Leben: Supplement zu Hegel's Werke*. Berlin, 1844. Reprint, Darmstadt, 1967.

"The Science of Logic (1870)." In *G. W. F. Hegel: Critical Assessments*. Vol. 1, *Nineteenth Century Readings*. Translated by G. S. Hall. Edited by Robert Stern. London: Routledge, 1993.

Rowe, William V. "Essence, Ground, and First Philosophy in Hegel's Science of Logic." *The Owl of Minerva*, 18.1 (Fall 1986): 47–56.

Ruschig, Ulrich, "Logic and Chemistry in Hegel's Philosophy." *Hyle: An International Journal for the Philosophy of Chemistry*, 7.1–2 (2001): 5–22.

Sandkaulen, Birgit. "Das 'leidige Ding an sich': Kant – Jacobi – Fichte." In *Kant und der Frühidealismus*. Edited by Jürgen Stolzenberg. Hamburg: Meiner, 2007.

Sans, Georg. "Hegels Idee des individuellen Lebens." *Theologie und Philosophie: Vierteljahresschrift*, 77.1 (2002): 54–72.

Die Realisierung des Begriffs: Eine Untersuchung zu Hegels Schlusslehre. Berlin: Akademie, 2004.

Schäfer, Alfred. *Der Nihilismus in Hegels Logik: Kommentar und Kritik zu Hegels "Wissenschaft der Logik."* Berlin: Arno Spitz, 1992.

Schäfer, Rainer. *Die Dialektik und ihre besonderen Formen in Hegel's Logik*. Hamburg: Meiner, 2001.

Schick, Friedrike. *Hegels Wissenschaft der Logik – metaphysische Letztbegrundung oder Theorie logischer Formen?* Freiburg: Alber, 1994.

Schmid, Aloys. *Entwicklungsgeschichte der Hegel'schen Logik*. Regensberg: Joseph Mai, 1858. Reprint, Hildesheim: Georg Olms, 1976.

Schmidt, Josef. *Hegels Wissenschaft der Logik und ihre Kritik durch Adolf Trendelenburg*. Stuttgart: Kohlhammer, 1977.

Schubert, Alexander. *Der Strukturgedanke in Hegels Wissenschaft der Logik*. Königsstein: Anton Hain, 1985.

Schulze, G. E. [anonymous], *Ænesidemus, oder über der vom Herrn Prof. Reinhold in Jena gelieferten Elementarphilosophie, nebst einer Verteidigung gegen die Anmassungen* der *Venunftkritik* (1792). Translated in part by George di Giovanni and H. S. Harris as Ænesidemus (excerpt)." In *Between Kant and Hegel: Texts in the Development of Post-Kantian Idealism*. Indianapolis, IN: Hackett, 2000.

"Aphorismen über das Absolute, als das alleinige Prinzip der wahren Philosophie, über die einzige mögliche Art es zu erkennen, wie auch über das Verhältnis aller Dinge in der Welt zu demselben." In *Neues Museum der Philosophie und Litteratur*. Edited by Friedrich Bouterwek, 1.2 (1803): 110–148. Reprinted in *Transzendentalphilosophie und Spekulation: Der Streit um die Gestalt einer Ersten Philosophie (1799–1807), Quellenband*. Edited by Walter Jaeschke. Hamburg: Meiner, 1993.

Kritik der theoretischen Philosophie. 2 vols. Hamburg, 1801.

Seidel, George J. "Hegel on Ground." *Idealistic Studies: An Interdisciplinary Journal of Philosophy*, 1 (September 1971): 219–226.

Sellars, Wilfrid. "Empiricism and the Philosophy of Mind." In *Minnesota Studies in the Philosophy of Science*. Edited by Herbert Feigl and Michael Scriven. Minneapolis: University of Minnesota Press, 1956.

Spaventa, B. "La prime categorie della logica di Hegel." In *Scritti filosofici*. Edited by G. Gentile. Naples: Morano, 1900.

Staats, Reinhart. "Der theologischgeschichtliche Hintergrund des Begriffs 'Tatsache.'" *Zeitschrift für Theologie und Kirche*, 70 (1973): 316–345.

Stace, W. T. *The Philosophy of Hegel: A Systematic Exposition*. London: Macmillan, 1924. Reprint, New York: Dover Publications, 1955.

Stekeler-Weithofer, Pirmin. "Hegel's Logic as a Theory of Meaning." *Philosophical Investigations*, 19.4 (1996): 287–307.

"Mathematical Thinking in Hegel's Science of Logic." In *Internationales Jahrbuch des deutschen Idealismus/International Yearbook of German Idealism*. Vol. 3, *Deutscher Idealismus und die analytische Philosophie der Gegenwart/German Idealism and Contemporary Analytic Philosophy*. Edited by Karl Ameriks. Berlin: De Gruyter, 2005.

Stern, Robert, ed. *G. W. F. Hegel: Critical Assessments*. Vol. 3. *Phenomenology of Spirit and Logic*. London: Routledge, 1993.

Stirling, J. Hutchison. *The Secret of Hegel*. Edinburgh and New York, 1865; 2nd edn, 1898.

Taylor, Charles. *Hegel*. Cambridge: Cambridge University Press, 1975.

A Secular Age. Cambridge, MA: Harvard University Press, 2007.

Theunissen, Michael. *Sein und Schein: Der kritische Funktion der Hegelschen Logik*. Frankfurt am Main: Suhrkamp, 1978.

Trendelenburg, F. A. *Logische Untersuchungen*. 2 vols. Leipzig: Hirzel, 1862.

Verene, Donald Phillip. "The True and the Bad Infinity." In *Logos and Eros: Essays Honoring Stanley Rosen*. Edited by Nalin Ranasinghe. South Bend, IN: St. Augustine's Press, 2006.

Vetö, Miklos. "Les métamorphoses de la causalité dans la logique de Hegel." *Revue philosophique de Louvain*, 98.3 (August 2000): 519–548.

Von Sivers, Kathrin. "Being: An Approach to the Beginning of Hegel's Wissenschaft der Logik." *Prima Philosophia*, 10.3 (1997): 335–340.

Wallace, Robert M. *Hegel's Philosophy of Reality, Freedom, and God*. Cambridge: Cambridge University Press, 2005.

Wallace, William. *Prolegomena to the Study of Hegel's Philosophy and Especially of his Logic*. 2nd edn. Oxford: Clarendon Press, 1931.

Wandschneider, Dieter. "Absolutes Wissen? Zu Hegels Projekt der Selbstbegründung einer absoluten Logik." In *Glauben und Wissen, Zweiter Teil (Hegel-Jahrbuch 2004)*. Edited by Andreas Arndt *et al*. Berlin: Akademie, 2004.

Weisshaupt, Kurt. "Zur Dialektik des Sollens in Hegels 'Wissenschaft der Logik.'" In *Hegel-Jahrbuch 1975*. Edited by Wilhelm R. Beyer. Cologne: Pahl-Rugenstein, 1976.

Wetzel, M. *Reflexion und Bestimmtheit in Hegels Wissenschaft der Logik*. Hamburg: Fundament, 1971.

White, Alan. *Absolute Knowledge: Hegel and the Problem of Metaphysics*. Athens, OH: Ohio University Press, 1983.

Winfield, Richard Dien. *From Concept to Objectivity: Thinking Through Hegel's Subjective Logic*. London: Ashgate, 2006.

Wohlfahrt, Günther. "Das unendliche Urteil. Zur Interpretation eines Kapitels aus Hegels 'Wissenschaft der Logik.'" *Zeitschrift für philosophische Forschung*, 39.1 (January–March 1985): 85–100.

Wölfle, Gerhard Martin. *Die Wesenslogik in Hegels "Wissenschaft der Logik": Versuch einer Rekonstruktion und Kritik unter besonderer Berücksichtigung der philosophischen Tradition.* Stuttgart: Frommann-Holzboog, 1994.

Yamane, Tomoyaki. *Wirklichkeit: Interpretation eines Kapitels aus Hegels "Wissenschaft der Logik."* Frankfurt am Main: Peter Lang, 1983.

Zimmerli, Walter. "Die Wahrheit des 'impliziten Denkers': Zur Logikbegründungsproblematik in Hegels Wissenschaft der Logik." *Studia Philosophica: Jahrbuch der Schweizerischen Philosophischen Gesellschaft*, 41 (1982): 139–160.

"Is Hegel's *Logic* a Logic?: Analytical Criticism of Hegel's *Logic* in Recent German Philosophy." In *Hegel and His Critics: Philosophy in the Aftermath of Hegel*. Edited by William Desmond. Albany, NY: State University of New York Press, 1989.

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